Additional Costs Of Second Language Instruction

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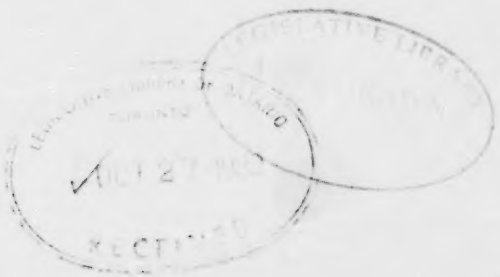
A STUDY
OF
ADDITIONAL COSTS
OF
SECOND LANGUAGE INSTRUCTION

DELOITTE HASKINS & SELLS ASSOCIATES

in collaboration with

NELLY McEWEN, Ph.D.



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December 7, 1979

Dr. S. J. Thiessen
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Dear Dr. Thiessen:

In late May, 1979, Deloitte Haskins & Sells Associates was commissioned to undertake a study of additional costs of second language instruction in Alberta. The study was completed in late November, 1979.

The study was concerned with identifying additional second language costs incurred by Alberta school jurisdictions in 1978, and with detailing these costs according to the following study dimensions:

- Program type
- Program stage
- Instructional level
- School size
- School setting

The report which is enclosed outlines the study purposes, methodology, findings and recommendations. The findings are based on a review of similar studies, questionnaires which were mailed to twenty-three school jurisdictions, interviews with second language administrators, and analysis of the data obtained.

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The partners and staff of Deloitte Haskins & Sells Associates appreciate the opportunity to cooperate with Alberta Education in completing this important study. We are confident that our report will be of continuing use in assisting the Department in connection with second language program funding.

Yours very truly,

Deloitte Haskins + Sells Associates

ABSTRACT

The primary purpose of the study was to identify and explain additional costs incurred by Alberta school jurisdictions providing second language instruction in 1978. Additional costs were defined as those which would not have been incurred had the second language program not been in existence. Three types of additional costs were identified: instructional, ancillary, and developmental. Costs were analyzed according to the following dimensions: second language (French, Ukrainian, German), program type (CORE, EXTENDED, BILINGUAL, IMMERSION), program stage (development, implementation, maintenance), instructional level (elementary, junior high, senior high), school size (small, medium, large), and school setting (urban, rural).

Information was collected by means of a questionnaire and interviews with school board officials. Data were compiled and analyzed according to the dimensions detailed above. Although questionnaires were mailed to the twenty-three school jurisdictions offering second language instruction in Alberta, the findings are based on the detailed analysis of five boards which were selected as providing a good cross section of all study dimensions.

The study revealed considerable diversity among programs both within and among boards with respect to staffing patterns (pupils/teacher), ancillary services provided, and developmental effort expended. The findings raised a number of issues meriting further investigation.

ACKNOWLEDGEMENTS

We wish to express gratitude to the many educational administrators within school boards involved in this study. Their interest in the study and willingness to cooperate were very important in bringing the study to a successful conclusion.

We are indebted to the members of the Steering Committee for their support and guidance: Dr. Jim Thiessen, Dr. Phillip Lamoureux, Mr. Walter Turch, and Mr. Jacques Moquin. Their assistance throughout the study was appreciated.

We would also like to thank Dr. Douglas Parker of the University of Alberta and Mr. Jim Jones of the Edmonton Public School Board for their helpful suggestions in the development of data collection procedures.

Finally, we wish to acknowledge the assistance provided by our accountants and administrative staff in diligently completing their duties.

PURPOSES

The primary purpose of the study was to identify and explain the additional costs incurred by Alberta school jurisdictions providing instruction in a second language during the calendar year 1978. The specific questions addressed were as follows:

- What are the costs associated with instruction in each of French, Ukrainian and German?
- How do costs vary as a function of program type within each second language (CORE, EXTENDED, BILINGUAL, IMMERSION)?
- What are the costs associated with the stages of program adoption (development, implementation, maintenance)?
- How do costs vary as a result of instructional level (elementary, junior high, senior high)?
- How do costs vary as a result of school size (small, medium, large)?
- How do costs vary as a result of school setting (urban, rural)?

A secondary purpose of the study was to identify areas where the program accounting procedures maintained by school jurisdictions were inadequate in providing the cost data required in this investigation and to recommend corrective action.

DEFINITIONS

- Program Types

  CORE - a program in which the second language is taught as a subject for a period of time comparable to other school subjects.

EXTENDED - a program in which the second language is taught as a subject and in addition one other subject (art, music, social studies, etc.) is taught in the second language.

BILINGUAL - a program in which the second language is taught as a subject and two or more other subjects are taught in the second language so that pupils are instructed in the second language up to a maximum of 50% of the time.

IMMERSION - a program in which the pupils are instructed in the second language in excess of 50% of the time.

- Program Stages

DEVELOPMENT - the earliest stage in which a program is developed, curricular and assessment materials are acquired, and additional materials are developed and/or revised to meet the needs of the program.

IMPLEMENTATION - the second stage, in which the program materials which have been developed are field-tested on a system-wide basis by the teachers in the schools.

MAINTENANCE - the final stage in which the program is operating in the schools and requires only minimal assistance to enable it to continue operation.

- Instructional Level

ELEMENTARY - grades 1 through 6.
JUNIOR HIGH SCHOOL - grades 7 through 9.
SENIOR HIGH SCHOOL - grades 10 through 12.

- School Size

SMALL - a school which has fewer than 200 pupils.
MEDIUM - a school which has 200 to 600 pupils.
LARGE - a school which has more than 600 pupils.

- School Setting

  URBAN - schools located in an urban setting.

  RURAL - schools located in a rural setting.

- Cost Types

  INSTRUCTIONAL - costs associated with providing classroom instruction to pupils.

  - Teacher Salaries - salaries and fringe benefits.
  - Equipment - equipment purchased.
  - Materials - supplies, textbooks and media materials purchased.
  - Transportation - transportation of pupils to school.

  ANCILLARY - costs associated with providing supplementary services which benefit the pupils.

  - Special Activities - trips, camps, cultural events, etc.
  - Professional Development - activities designed to enhance a teacher's effectiveness.
  - Support Staff - resource teachers, teacher aides, testing assistants, language laboratory assistants, counsellors, external consultants.
  - Resource Personnel - research assistants, counsellors, external consultants.
  - Supervision - supervisors, consultants, department heads, curricular associates.

  DEVELOPMENTAL - costs associated with developing a new program.

  - Curriculum - acquisition and/or development of curricular materials.
  - Assessment - development of assessment materials and/or external evaluations.

- Additional Costs

  Costs which would not have been incurred had the second language program not been in existence.

  - Instructional Salaries - the difference between the cost of (a) second language teachers, and (b) additional teachers at average salaries of other programs required to maintain pupil/teacher

ratios, were all second language full-time equivalent pupils to transfer into regular programs.

- Other Instructional - those incurred specifically for the second language program.

- Ancillary - all incurred specifically for the benefit of pupils in the second language program.

- Developmental - all incurred for the development of a second language program.

METHODOLOGY

The study was conducted in two stages. The first stage identified cost types and developed methodological procedures. The primary sources of information were literature on other second language cost studies and the perceptions of second language educators. The second stage consisted of collecting and analyzing the data and determining the additional costs associated with each second language program.

Additional costs are defined as those which would not have been incurred had the second language program not been in existence. Three types of costs were identified: instructional costs incurred in providing classroom instruction to pupils, ancillary costs incurred in providing supplementary services to program pupils and developmental costs incurred in developing a new program. The elements comprising each cost type are:

Instructional	Ancillary	Developmental
Teacher Salaries	Special Activities	Curriculum
Equipment	Professional Development	Assessment
Materials	Support Staff	Other
Transportation	Resource Personnel	
Other	Supervision	

- Instructional costs are basic to all programs which have reached the implementation stage as they represent the cost of the teacher, the instructional materials necessary to present the curriculum, and the cost of transporting, where necessary, the pupils to the teacher. All second language program teacher costs are not classified as additional. The other elements included under instructional costs are all considered additional if they are provided specifically for a second language program without benefit to non-program pupils.

- Ancillary costs are all additional as they would not be incurred without the existence of the program. The supplementary services they represent are provided specifically for a particular program. These costs are discretionary in that the related services are not essential in offering a program; whether or not they are provided depends on their need as perceived by the school board.

- Developmental costs are all additional as they are incurred for the development of a particular program. Their magnitude is dependent on the variety and extent of the developmental effort expended in initiating a program.

Once the cost types were identified, a questionnaire was designed to elicit information about the costs incurred by school jurisdictions operating second language programs. A draft questionnaire was reviewed by second language educators for omissions and revisions and another draft was field-tested with a large jurisdiction. Copies of the questionnaire were sent to the twenty-three school jurisdictions offering second language programs in 1978 under Section 150(1)(a) and (b) of the School Act.

Five school jurisdictions were selected for intensive study. They were chosen on the basis of the diversity of programs offered, and the varying stages of adoption and school setting which they represented. These five boards were provided with assistance as necessary in the compilation of data according to the research questions, i.e., program type, stage of adoption, instructional level, and school size. Once the data

had been compiled, the information was reviewed for completeness and possible areas of misinterpretation. Interviews with selected personnel from each of the five boards were arranged to provide clarification of the questionnaire items and on specific details concerning the second language programs offered.

FINDINGS

- Instructional Costs - All CORE FRENCH programs at the elementary level had negative additional teacher costs, i.e., cost savings, indicating that the cost of the teachers was less than the potential cost of replacing them with regular teachers. This finding held for all elementary French programs in an implementation stage. However, all other elementary programs, (EXTENDED, BILINGUAL and IMMERSION) in a maintenance stage incurred additional costs for teacher salaries and benefits. At the junior high level, two of the five CORE FRENCH programs had negative costs as did one of the three IMMERSION FRENCH programs; all other French programs had additional costs for teachers.

When additional teacher costs and other instructional costs were combined, only three programs with negative additional teacher costs had overall additional costs: a rural junior high CORE FRENCH program, the urban elementary EXTENDED FRENCH program, and a rural elementary IMMERSION FRENCH program.

Examination of the instructional costs incurred for equipment, materials, transportation and other related expenditures revealed some consistencies across programs, stages and instructional levels. In general, progressively less was spent by all boards on these items advancing from the elementary to the secondary levels, as the result of a decreasing pattern in the FTE pupils. Expenditures by the largest board for junior high (implementation) and senior high (maintenance) CORE FRENCH programs reflected increasing costs. All programs in an implementation stage incurred considerable additional expenditures. The urban board providing an articulated IMMERSION FRENCH program (mainten-

ance) across all instructional levels expended substantial additional funds for instructional purposes; the single most costly item for this program at all instructional levels was transportation. While the other two urban boards also provided transportation for the IMMERSION FRENCH program, the total amount spent was considerably less due to the fewer number of pupils involved. While the rural boards also provided transportation, this was not an additional cost to the French program as pupils required this service regardless of language of instruction.

- System Costs - While instructional costs (representing the cost of providing pupils with basic classroom instruction which requires a teacher and may include instructional materials and transportation) are incurred in individual schools, some costs are incurred for programs on a system-wide basis and depend on board policy and perceived program needs. If these additional services are provided, additional funds are allocated to specific programs. Both ancillary and developmental costs are system costs which can be attributed to a particular instructional level but not to a specific school. Ancillary costs are incurred for special activities, professional development, support staff, resource personnel and supervision; developmental costs are incurred for curriculum, assessment and other related expenditures.

  Analysis of ancillary costs revealed a general trend across programs to spend more at the elementary than at either secondary level. Furthermore, substantially more financial support was provided to the IMMERSION FRENCH and BILINGUAL (FRENCH and UKRAINIAN) programs than to other programs; this was due largely to the support staff provided for these programs at the elementary level. All boards provided some consultative staff for the second language program. For CORE programs (maintenance) this was often the only ancillary service provided. Programs in an implementation stage tended to incur more ancillary costs; in addition to support staff and supervision, boards provided professional development activities for teachers and special activities for pupils. The fully articulated IMMERSION FRENCH program (maintenance) also received considerable financial support across all instructional levels.

Four boards reported developmental costs; for most programs these costs were incurred for the acquisition of curricular materials. Staff from three boards also developed materials, primarily for programs in an implementation stage. Generally, more expenditures were incurred for programs in the implementation than the maintenance stage; this was anticipated as programs are often developed and implemented concurrently.

The summary table presents the total additional cost for all programs offered by the five boards in the sample in 1978. When all program variations were added together the collective additional cost for the five boards was $1,412,718.

Summary Table

Total Additional Cost for Second Language Programs
Offered by Intensive-Study Boards in 1978

Program Type	Elementary	Junior High	Senior High
CORE			
French	$ <78,997>	$ 98,851	$ 134,618
Ukrainian	-	4,062	7,374
German	-	6,042	38,206
EXTENDED			
French	88,395	9,305	-
BILINGUAL			
French	88,776	12,831	<19,955>
Ukrainian	162,360	-	-
IMMERSION			
French	505,968	231,930	122,952
TOTAL	$ 766,502	$ 363,021	$ 283,195

RECOMMENDATIONS

The following recommendations are addressed to Alberta Education.

- Investigate the effects on teacher costs of varying pupil enrolment, teacher deployment and average teacher salaries.

- Investigate the impact of second language programs on the organization of schools in terms of the use of physical and human resources expended and opportunity cost.

- Replicate the study in future years.

- Establish a mechanism to examine the requirements for providing a sound education in a second language.

- Investigate the costs of providing hypothetical "model" second language program alternatives.

- Encourage school jurisdictions to maintain accounting records to the element level so that expenditures are attributed to specific programs.

- Investigate the comprehensive additional cost of second language programs over a three or five year period.

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CHAPTER 1

INTRODUCTION

This introductory chapter is divided into five sections. It provides background to the study, describes the purposes and defines the terms employed, and provides a general outline of the methodology and scope of the study.

BACKGROUND

The study responds to a need to investigate the additional costs incurred by Alberta school jurisdictions providing instruction in a second language. While second language core programs have traditionally been offered, a recent trend across Canada has been to introduce alternative programs - extended, bilingual and immersion - each of which provides increasing instructional time in second languages. A concomitant of this development has been an increased financial commitment on the part of the school boards which offer these types of second language programs. This study identifies the costs associated with the different program types.

In Alberta, the School Act was amended in 1968 to permit instruction in French from grades 1 through 12; in 1971, it was extended to include the use of languages other than English or French for purposes of instruction. Section 150 of the School Act, which deals with the matter of language of instruction, reads in part as follows:

> 150 (1) A board may authorize:
>
> (a) that French be used as a language of instruction, or
> (b) that any other language be used as a language of instruction in addition to the English language, in all or any of its schools (1971:4).

Federally, the Language Programmes Branch of the Department of the Secretary of State was established to promote, facilitate and encourage the acquisition and use of the two official languages of Canada. Among the programs administered by this branch is the program of Bilingualism in

Education which was designed to provide increased opportunity for members of the majority official language group in each province or territory to acquire a knowledge of their second official language and for the minority official language group in each province or territory to be educated in their first official language. The Federal-Provincial Program of Cooperation for Bilingualism in Education was initially implemented in 1970. Those aspects of the program which apply especially to school systems include the formula payments and the special projects. According to the former, the Federal Government pays a percentage to each provincial government for education in the minority official language, for the teaching of the second official language and for administration costs. According to the latter, which are intended to assist provincial governments in developing innovative or experimental projects in both minority and second language instruction, the projects are financed on a cost-sharing basis between the federal and provincial governments.

Recently, the Ontario Ministry of Education sponsored a number of studies into the costs of French programs; three studies examined the costs of second language programs (Halpern et al, 1976; Partlow, 1977; MacNab and Unitt, 1978) while two compared English-language and French-language program costs (Desjarlais, 1977; Churchill et al, 1978). The present investigation represents a similar endeavor designed to identify dollar costs associated with instruction in a second language in the province of Alberta.

PURPOSES

The primary purpose of the study is to provide Alberta Education with the identification and explanation of additional costs incurred by school jurisdictions providing instruction in a second language in 1978. The

specific questions addressed are as follows:

- What are the costs associated with different second languages?
    - French
    - Ukrainian
    - German
- How do costs differ as a function of program type?
    - core
    - extended
    - bilingual
    - immersion
- What are the differential costs associated with the stages of program adoption?
    - development
    - implementation
    - maintenance
- How do costs vary as a result of instructional level?
    - elementary
    - junior high
    - senior high
- How do costs vary as a result of school size?
    - small
    - medium
    - large
- How do costs vary as a result of school setting?
    - urban
    - rural

A secondary purpose of the study is to identify areas where the program accounting procedures maintained by school jurisdictions were inadequate in providing the cost data required in this investigation and to recommend corrective action.

DEFINITION OF TERMS

PROGRAM TYPES

CORE - a program in which the second language is taught as a subject for a period of time comparable to other school subjects.

EXTENDED - a program in which the second language is taught as a subject and in addition one other subject (art, music, social studies, etc.) is taught in the second language.

BILINGUAL - a program in which the second language is taught as a subject and two or more other subjects are taught in the second language so that pupils are instructed in the second language up to a maximum of 50% of the time.

IMMERSION - a program in which the pupils are instructed in the second language in excess of 50% of the time.

PROGRAM STAGES

DEVELOPMENT - the earliest stage in which a program is developed, curricular and assessment materials are acquired, and additional materials are developed and/or revised to meet the needs of the program.

IMPLEMENTATION - the second stage, in which the program materials which have been developed are field-tested on a system-wide basis by the teachers in the schools.

MAINTENANCE - the final stage in which the program is operating in the schools and requires only minimal assistance to enable it to continue operation.

INSTRUCTIONAL LEVEL

ELEMENTARY - grades 1 through 6.

JUNIOR HIGH SCHOOL - grades 7 through 9.

SENIOR HIGH SCHOOL - grades 10 through 12.

SCHOOL SIZE

SMALL - a school which has fewer than 200 pupils.

MEDIUM - a school which has 200 to 600 pupils.

LARGE - a school which has more than 600 pupils.

SCHOOL SETTING

URBAN - schools located in an urban setting.

RURAL - schools located in a rural setting.

COST TYPES

INSTRUCTIONAL - costs associated with providing classroom instruction to pupils.

- Teacher Salaries - salaries and fringe benefits.
- Equipment - equipment purchased.
- Materials - supplies, textbooks and media materials purchased.
- Transportation - transportation of pupils to school.

ANCILLARY - costs associated with providing supplementary services which benefit the pupils.

- Special Activities - trips, camps, cultural events, etc.
- Professional Development - activities designed to enhance a teacher's effectiveness.
- Support Staff - resource teachers, teacher aides, testing assistants, language laboratory assistants, secretaries.
- Resource Personnel - research assistants, counsellors, external consultants.
- Supervision - supervisors, consultants, department heads, curricular associates.

DEVELOPMENTAL - costs associated with developing a new program.

- Curriculum - acquisition and/or development of curricular materials.

- Assessment - development of assessment materials and/or external evaluations.

ADDITIONAL COSTS

Costs which would not have been incurred had the second language program not been in existence.

- Instructional Salaries - the difference between the cost of (a) second language teachers, and (b) additional teachers at average salaries of other programs required to maintain pupil/teacher ratios, were all second language full-time equivalent pupils to transfer into regular programs.

- Other Instructional - those incurred specifically for the second language program.

- Ancillary - all incurred specifically for the benefit of pupils in the second language program.

- Developmental - all incurred for the development of a second language program.

METHODOLOGY

It was decided to conduct the study in two stages. The first was associated with the identification of cost types described below and the development of methodological procedures. The primary sources of information were literature on the topic and the perceptions of second language educators. The second stage consisted of collecting and analyzing the data and determining the additional costs associated with each second language program.

TYPES OF COSTS

Additional costs have been defined as those which would not have been incurred had the second language program not been in existence. Three types of costs were identified: instructional costs incurred in providing

classroom instruction to pupils, ancillary costs incurred in providing supplementary services to program pupils and developmental costs incurred in developing new programs. Table 1 presents the elements which comprise each cost type.

- Instructional costs are basic to all programs as they represent the cost of the teacher, the instructional materials necessary to present the curriculum and the cost of transporting, where necessary, the pupils to the teacher. These costs are incurred every year.

  As a teacher is required to instruct pupils regardless of the program in which they are enrolled, all teacher costs cannot be considered additional. Rather, the additional teacher costs are determined by calculating what it would cost to instruct all second language pupils in English, and subtracting this amount from the actual costs to instruct them in the second language. For these calculations, it has been assumed that additional English-speaking teachers would be employed at the average salary of present teachers, and that it would be necessary to maintain existing pupil/teacher ratios for English-language instruction in all school jurisdictions.

Table 1

Classification of Additional Costs

INSTRUCTIONAL	ANCILLARY	DEVELOPMENTAL
Teacher Salaries	Special Activities	Curriculum
Equipment	Professional Development	Assessment
Materials	Support Staff	Other
Transportation	Resource Personnel	
Other	Supervision	

The other elements included under instructional costs are considered additional if they are provided specifically for a second language program without benefit to non-program pupils.

- Ancillary costs are all additional as they would not be incurred without the existence of the program. The supplementary services they represent are provided specifically for a particular program. These costs are discretionary in that the related services are not essential in offering a program; whether or not they are provided depends on their need as perceived by the school board. These costs may be incurred every year.

- Developmental costs are all additional as they are incurred for the development of a particular program. Their magnitude is dependent on the variety and extent of the developmental effort expended in initiating a program. These costs are not normally incurred once the program has reached the maintenance stage.

DATA COLLECTION

Once the cost types were identified, a questionnaire was designed to elicit information about the costs incurred by school jurisdictions operating second language programs. A draft questionnaire was reviewed by second language educators for omissions and revisions and another draft was field-tested with a large jurisdiction. Copies of the questionnaire were sent to the twenty-three school jurisdictions offering second language programs in 1978 under Section 150(1)(a) and (b) of the Alberta School Act.

Five school jurisdictions were selected for intensive study. They were chosen on the basis of the diversity of programs offered, and the varying stages of adoption and school setting which they represented. The five boards were provided with assistance as necessary in the compilation of data according to the research questions, i.e., program type, stage of adoption, instructional level, and school size. Once the data had been compiled, the information was reviewed for completeness and possible areas of misinterpretation. Interviews with selected personnel from each of the five boards were arranged to provide clarification of the questionnaire items and on specific details concerning the second language programs offered.

Six of the remaining eighteen boards offering second language programs under Section 150(1)(a) and (b) returned their completed questionnaires. Due to the significant effort required by the study team to assist in the compilation of data and to ensure the accuracy and comparability of the information provided by the five sample boards, and the extensive revisions to financial and other data required, it was decided not to analyze or report the information from the six boards. Assuring parallel findings would have required the same detailed analysis as for the five sample boards.

ANALYSES

As the calendar year 1978 encompassed portions of two school years, 1977-1978 and 1978-1979, the number of pupils and teachers reported for June, 1978 and December, 1978 were prorated to arrive at a calendar year equivalent. The pro rata numbers for 1978 were derived by assigning a weight of .67 to June and .33 to December so that full-time equivalent calculations would correspond to the financial data requested for the calendar year 1978.

In order to calculate the additional teacher salaries and benefits for second language instruction, it was necessary to convert all second language pupils and teachers to full-time equivalents (FTE) based on the number of minutes per week of second language instruction involved, thereby ascribing to them the same full-time status as pupils and teachers in the rest of the school system. The teachers' instructional minutes included both instruction and preparation time utilized in a second language program. The second language program FTE pupils, teachers and their earnings were subtracted from the total system figures to arrive at regular non-second language FTEs and earnings. Pupil/teacher ratios and average teacher salaries and benefits were calculated for each of the second language programs and for regular school programs. Hypothetical marginal regular program teacher costs were then determined by assuming a transfer of all second language FTE pupils to regular programs and calculating the extra regular program teacher costs which would be required to maintain existing pupil/teacher ratios at average salaries and benefits. These

marginal regular teacher costs were deducted from actual second language teacher costs to arrive at additional second language teacher costs. In certain cases, this calculation resulted in negative additional second language costs, due in part to lower average teacher salaries and/or higher pupil/teacher ratios for second language programs.

As ancillary and developmental costs are incurred on a system-wide basis rather than at the school level, analysis by school size did not apply. Ancillary costs associated with staff providing services to more than one program were allocated to a specific program on the basis of time estimates.

SCOPE

The study was delimited as follows:

- Information was requested from all school jurisdictions offering second language programs pursuant to Section 150(1)(a) and (b) of the Alberta School Act.
- Detailed analysis of additional costs was undertaken for five of the above twenty-three school jurisdictions.
- Cost data were collected for the calendar year 1978.

The study objectives, research design and methodology established a number of limitations for the study:

- The restriction in scope related to the time at which information was collected indicate that conclusions can be drawn only about the 1978 calendar year.
- It was outside the scope of the present study to examine or discuss the quality of instruction offered to students.

- Estimation of the comprehensive additional costs (all costs incurred over the life span of any program) of any cost type was beyond the purview of the present investigation.

CHAPTER II

RELATED LITERATURE

The purpose of this chapter is to examine the different approaches taken by others to investigate the costs of second language instruction. While extensive literature is available on the different types of second language programs, relatively little has been written on the costs of offering such programs. In the Canadian context, however, the Ontario Ministry of Education has sponsored a number of studies into the costs of French programs. The types of costs identified and the methodological approaches used to examine them are reported hereunder. A description of the PAB Classification System used by Alberta school jurisdictions concludes this chapter.

TYPES OF COSTS IDENTIFIED IN RELATED STUDIES

Three studies in Ontario examined the costs of second language programs (Halpern et al, 1976; Partlow, 1977; MacNab and Unitt, 1978) while two compared French-language and English-language program costs (Desjarlais, 1977; Churchill et al, 1978). Investigation of the dollar costs of alternative second language programs was one of the purposes of the research conducted by Halpern; the other two second language studies were designed specifically to examine the costs of alternative French programs.

Each of the three second language studies divided costs into three dimensions:

- program
- delivery
- environment.

In general terms, program costs are those associated with the curricular content, delivery costs with the presentation of the program to the pupils and environmental costs with the facilities necessary to provide

the program to the pupils. Table 2 presents the classification of costs according to the three dimensions. While there is some consensus with respect to the broad classifications, differences in individual types of cost are evident. For example, Halpern classified the costs of consultants and coordinators under program development while Partlow subsumed this expenditure under delivery. Furthermore, Halpern viewed pupil transportation as a delivery cost while Partlow and MacNab and Unitt considered it environmental. All agreed, however, that the cost of teacher salaries and instructional materials are delivery costs - those associated directly with the instruction of pupils.

The two studies concerned with comparing French-language and English - language program costs classified them in a similar albeit less-detailed fashion than did the second language program studies. Table 3 presents their classification of costs.

METHODOLOGY OF RELATED STUDIES

Table 4 presents a summary of the samples, programs and analytic procedures undertaken in all five Ontario studies. Inspection of the table reveals differences with respect to sampling, programs studied and analytic procedures. While the reports were all useful in defining the cost areas to be examined, their analyses included a more comprehensive review of program costs than the present investigation which attempts to identify and explain additional costs only. The concepts of instructional time and level of service, addressed in the Ontario studies, were of importance to the major purpose of this study. Each is examined in turn.

INSTRUCTIONAL TIME

An important concept in the second language program studies was the analysis of instructional time (the cost of the teacher), the most significant cost of offering a program to pupils. Determining the additional cost of second language programs requires a method of comparing instructional time across programs. Exploration of the methods employed in the Ontario Studies provided a basis for developing a similar analytic

Table 2

Classification of Program Costs
in Second Language Studies

Halpern et al (1976)*	Partlow (1977)**	MacNab & Unitt (1978)***
NEW PROGRAM DEVELOPMENT AND INSTALLATION COSTS A. Coordinators and consultants B. Teachers (remuneration) C. Other teacher training costs D. Other fees and contractual services E. Classroom materials for new programs	**PROGRAM DEVELOPMENT** A. On-going program development (Central French department and other costs)	**PROGRAM** A. Content (what) B. Time allocation (when) C. Pedagogical methods (how)
DELIVERY SYSTEM A. Student distribution (transportation) B. Program organization (teacher-students) C. Teachers (salaries, etc.) D. Media (instructional materials)	**DELIVERY** A. Consumable supplies B. Academic support staff C. Teachers D. Secretarial and paraprofessional staff E. Supervision and professional development F. Travel of French teachers	**DELIVERY** A. Organization of pupils B. Staff assignment C. Instructional materials
ENVIRONMENT A. OVERALL BOARD COSTS 1. Business administration 2. Instruction 3. Plant operation 4. Plant maintenance 5. Education services 6. Attendance, health and food services 7. Computer services 8. Transportation 9. Other B. SCHOOL ENVIRONMENT 1. Physical environment 2. General support facilities 3. Program support facilities 4. Individual student support facilities	**ENVIRONMENT** A. Administration B. Building and site C. Educational services D. Furniture and equipment E. Plant maintenance F. Plant operation G. Transportation of students	**SUPPORT AND MILIEU** A. Transportation and school location B. Building operation and maintenance C. Individual student support D. Resource service E. General support service

* pp. 275-285
** pp. 33-34
*** pp. 17-34

Table 3

Classification of Program Costs in Language of Instruction Studies

Desjarlais (1977)	Churchill et al (1978)
1. Instruction	1. Instruction
(a) administration	(a) school personnel
(b) services and programs	(b) supplies
(c) schools	(c) other
2. Business Administration	2. Business Administration
3. Plant Operation and Maintenance	3. Plant and Maintenance
4. Other Operating Expenditures	4. Other Operating Costs
5. Student Transportation	5. Transportation
6. Debt Charges	6. Education Services
	(a) support staff
	(b) supplies
	(c) other

Table 4

Summary of Research Procedures in
Ontario Studies

Study	Sample	Programs	Analyses
ɔern et al 5	8 elementary and intermediate schools	core French extended French immersion French	cost/class/year of instruction
tlow, 1977	4 urban and 3 semi-urban boards (elementary and intermediate levels)	core French extended French immersion French	cost/student/year of program, delivery and environment
Nab and Unitt 8	7 elementary and intermediate schools 4 secondary schools	core French extended French immersion French	cost/teacher/year of instruction[1] cost/year of instructional supplies[2] cost/year of curriculum development
jarlais, 1977	8 boards (elementary and secondary levels)	French-language English-language	differential cost/student/year of francophone/anglophone education
rchill et al 78	7 elementary boards 4 secondary boards	French-language English-language	differential cost/student/year of francophone/anglophone educational services

and 2 = cost/class/year of instruction

technique in the present investigation.

Central to the Halpern costing model is the allocation to various programs of instructional time, i.e., the minutes per day or per cycle when a pupil is in school. The cost of delivering a program to pupils depends on the deployment of teachers and pupils in relation to one another. In any given school, despite organizational variations, the number of pupils assigned to a teacher averages out to a "traditional classroom" in which each teacher is responsible for delivering subject matter to a group of pupils for a certain period of time. For a pupil body of any size, the average class size (pupils per teacher) determines the number of classes and thereby the number of teachers. Therefore, class size is an important determinant of cost as decisions about it determine the minimum number of teachers needed for a particular school. The number of additional teachers required is determined by the amount of preparation time allocated to teachers. This additional teacher time adds to school costs and is assigned to the program for which it is provided.

Partlow extended the cost data provided by Halpern to include system-wide costs as well as in-school costs. For both cost types, the allocation to a particular school or program within it depended on minutes per week of instruction and number of pupils. For example, if French instruction required 150 minutes out of a total of 1500 minutes per week and 200 of the 600 students in the school took French, the portion of the principal's salary allocated to the cost of French instruction would be (1977:5):

$$\frac{150}{1500} \times \frac{200}{600} \times \text{principal's salary}$$

A similar procedure was used in the calculation and apportionment of all costs to a program. The major variables depended on the number of pupils and the time assigned to a program. Costs were compiled into specific categories of expenditures within the school: direct costs of the French program only; shared costs within the school - salaries, services and materials; system-wide costs shared within the school - administration, instructional services and supervision; capital costs; and transportation of

pupils (1977:4). Partlow attempted to calculate the actual costs of elementary French for any Ontario school system in 1975-1976.

MacNab and Unitt further refined cost analysis techniques. They developed a cost analysis model which could be applied to any program and which defined the cost of a program as follows:

$$C_e \ [M_e \ (I_e + P_e)]$$

where e = a subject or program element

C_e = proportion of time allocated to a program element

I_e = instruction time

P_e = planning and preparation time

M_e = salary (or average salary) of teachers of a program element

The per pupil cost ratio can be obtained by dividing this cost weight factor by class size Z. The model can be useful to planners because the five parameters C_e, I_e, P_e, M_e and Z determine most of the cost of delivering programs (1978:77).

LEVEL OF SERVICE

Whereas the second language program cost studies were concerned primarily with analyzing the annual cost of classroom instruction, the language of instruction studies were concerned with comparing the cost of services provided to pupils in English and French school settings.

The Desjarlais study was designed to determine the costs of providing instruction in French to pupils enrolled in French-language instructional units in areas of high concentration of Francophones. Two types of differential costs of French-language instruction were postulated: the actual differential cost (expenditures) incurred by a school board during the year, the actual differential cost being brought about by the presence of two language groups within a board's organization, and the estimated differential cost for additional services and materials needed by a board to promote a level of service which would provide a quality, i.e., "model" education program for Francophones (1977:3). The summaries of the actual differential costs reported conformed to the Uniform Code of Accounts used

by the Ontario Ministry of Education.

The Churchill study extended the work of Desjarlais by defining a general theoretical framework for costing educational services for a linguistic minority. The study, employing a more intensive methodology than usually adopted in studies of school board costs, analyzed the differential costs of instruction for different types of schools both within and between school boards at the elementary and secondary levels. The study concluded that Francophones in Ontario had unmet educational needs and that they potentially suffer from a position of inequality compared with anglophones, due in part to the differential services offered to pupils and teachers (1978:iii-iv).

PAB CLASSIFICATION SYSTEM

In 1972, Alberta Education published an interim edition of a Program Accounting and Budgeting (PAB) manual to provide provincial school jurisdictions with a standardized system for classifying financial transactions and balances. This PAB system emphasizes the purposes of a school organization by identifying the distribution of resources to the programs or activities which form the basis for a school system's existence. Program accounting forms the essential information base for the development of the processes of a Planning, Programming, Budgeting, Evaluation System (PPBES).

Traditional accounting and budgeting practices emphasize the physical and human resources purchased for use in the operation of a school system; program accounting and budgeting add additional levels of information about the programs and activities designed to provide instruction to the pupils. In this PAB system, the traditional type of information is retained to assist in the control of expenditures, while the new emphasis on the goals of the organization permits decision-makers to assess the purposes of the system in terms of the resources which are being used.

In 1975, a supplement to the interim document was published which contained changes to the original responding to the needs of the provincial and local

governments. Subsequent amendments to the codes and classifications are being developed continuously as additional needs are identified.

The following types of information contained in the PAB Manual are relevant to the present study:

OBJECTS - the commodity, article or service obtained as a result of a specific expenditure. The code numbers and classification of the seven major categories or first-level objects are outlined below:

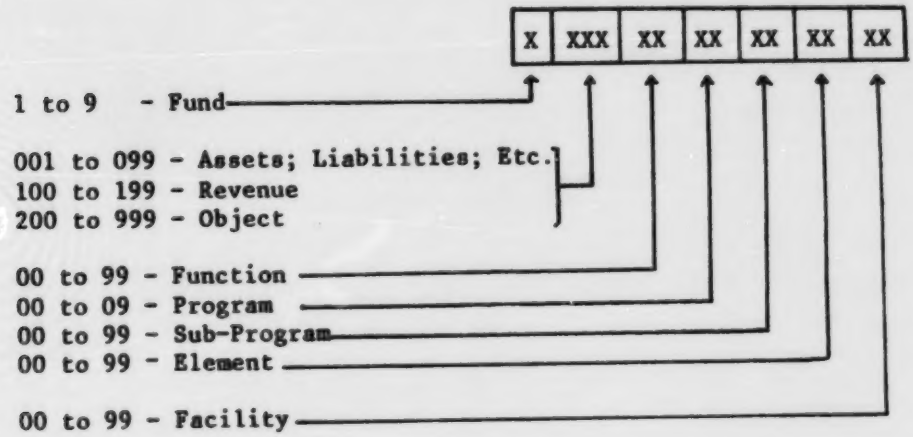
Code	Classification
200	Salaries
300	Employee Benefits and Allowances
400-500	Services Purchased or Contracted
600	Supplies and Materials
700	Capital Outlay
800	Debt Services
900	Transfers

FUNCTIONS - the broadest category of expenditure that is desirable or practical to identify for educational purposes. The twelve functions are:

Code	Classification
02	Elementary School Instruction
03	Junior High School Instruction
04	Senior High School Instruction
05	Special Education
06	Community Services
07	Pupil Personnel Services
08	Administration
09	Operation and Maintenance
10	Transportation of Pupils
11	Debt Services
12	Capital out of Current Revenue
13	Early Childhood Services

Each of the above functions is further defined by the programs which comprise it. Program costs are allocated to the appropriate functional area that receives the goods or services. Sub-programs provide a further sub-division of a program, i.e., second languages is program 02, French is sub-program 01. An element is a further subdivision possible under the PAB system, e.g. Core, Extended, Bilingual, Immersion.

The coding system describes the manner in which the various accounts are coded to facilitate identification, posting, storage, and retrieval of information. The coding structure consists of a total of fourteen digits, separated into seven distinct blocks of information as illustrated.*


X XXX XX XX XX XX XX
1 to 9 - Fund
001 to 099 - Assets; Liabilities; Etc.
100 to 199 - Revenue
200 to 999 - Object
00 to 99 - Function
00 to 09 - Program
00 to 99 - Sub-Program
00 to 99 - Element
00 to 99 - Facility

SYNOPSIS

The Ontario studies served to define the board areas of second language program costs. The general consensus among investigators with respect to the broad classifications did not apply to specific types of expenditures subsumed under each. Examination of the PAB Classification System employed in Alberta defined the types of costs which could be retrieved and assigned to a specific program.

The Ontario studies were concerned with a more comprehensive review of program costs than the present investigation, the primary purpose of which

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*Alberta Education. PAB Manual. (1975:6).

is to identify additional costs incurred by school jurisdictions operating second language programs. Furthermore, organizational differences between the Ontario and Alberta school systems precluded replication of the former studies. Differences in the studies reviewed with respect to sampling, programs studied and analytic procedures provided the investigators of the present study with considerable choice of approach, however; of particular relevance were the concepts of instructional time and level of service.

The Alberta study, then, is concerned only with the identification and explanation of additional costs of second language instruction. This meant omitting any analysis of costs which can be attributed to any program on the basis of assigning to each a portion of the costs based on the number of pupils. Included among these costs are environmental costs and those associated with providing services of potential benefit to all pupils in a school system; according to the PAB System, the related functions include 05 to 13 identified in an earlier section of this chapter. Only costs incurred specifically and exclusively for second language programs, without benefit to other non-program pupils were collected and analyzed. Three types were identified: instructional, ancillary and developmental. The determination of the additional portion of each is reported in the following chapter.

CHAPTER III

METHODOLOGY

This chapter presents the methodology of the study. It briefly describes the instruments used and the method of collecting the data. Reported in detail are the analytic procedures and the method of calculating additional second language program costs.

INSTRUMENTATION

QUESTIONNAIRE

While the review of the literature served as a basis for the initial development of the questionnaire, discussions with members of the Steering Committee served to delimit the scope of the study. Once a tentative list of questions related to the cost areas under study was developed, it was submitted to the Supervisor of Second Language Instruction for a large jurisdiction who examined its comprehensiveness and determined the feasibility of collecting the data. A preliminary version of the questionnaire was drafted and reviewed for omissions and revisions. A second draft was devised and submitted to members of the Steering Committee for their reaction. The final draft was field-tested with a large jurisdiction. Copies of the final questionnaire were sent to school jurisdictions operating second language programs. An abridged version is presented in Appendix A.

The questionnaire was designed to elicit information about the costs Alberta school jurisdictions incur when implementing instruction in a second language. It consisted of 27 items, seven of which required information necessary to classify the cost data required in the remaining twenty questions. The items in the questionnaire corresponded to the research questions and were arranged to facilitate the completion of the questionnaire by personnel from a school jurisdiction. It was divided into four major sections:

- total school jurisdiction information
- second language instruction
- second language support staff
- second language program development

Information about the total school jurisdiction was requested to serve as a basis for comparing instructional costs between regular instruction and second language instruction. Consequently, questions related to teacher salaries, materials, equipment and transportation were parallel. Cost data specific to second language programs were requested for two types of costs - ancillary and developmental - both of which were defined as additional as they are incurred in providing services and materials of benefit exclusively for the second language programs.

INTERVIEW SCHEDULE

An interview schedule was designed to elicit information from school jurisdictions which would assist the investigators in interpreting the data provided in the questionnaire. The interview schedule is presented in Appendix B.

DATA COLLECTION

Five Alberta school jurisdictions, operating second language programs pursuant to Section 150(1)(a) and (b) of the School Act, were selected for intensive study. They were chosen on the basis of the diversity of programs which they offered and the varying stages of adoption represented. The five boards were provided with assistance as necessary in the compilation of data according to the research questions, i.e., program type, instructional level, school size. Once the data had been compiled, the information was reviewed for completeness and possible areas of misinterpretation. Interviews with selected personnel from each of the five boards were arranged during September to provide clarification as necessary of the questionnaire items and specific details concerning the

the second language programs offered. The data were subsequently analyzed and the results tabulated.

ANALYTIC PROCEDURES

As the cost data for the calendar year 1978 encompassed portions of two school years, 1977-1978 and 1978-1979, the number of pupils and teachers reported for June 1978 and December 1978 were prorated to arrive at a calendar year equivalent. The pro rata number of pupils and teachers for 1978 was derived by assigning a weight of .67 to June figures and .33 to December figures so that full-time equivalent calculations would correspond to the financial data requested for the calendar year 1978. For example, if there were 200 pupils in June and 250 in December, the calendar year equivalent would be 216.5 pupils (200 x .67 = 134.0 plus 250 x .33 = 82.5).

In order to calculate the cost of second language instruction, it was necessary to convert all second language pupils and teachers to full-time equivalents (FTE), thus ascribing to them the same full-time status as pupils and teachers in the system.

All pupils enrolled in the system were considered to be full-time equivalents. By converting second language pupils into FTEs, based on minutes per week of second language instruction, fewer are assumed to receive all their instruction in the second language. This permits the calculation of pupil/teacher ratios for second language programs which are comparable to system calculations. For example, if 400 pupils were enrolled in a senior high CORE FRENCH program and received 200 minutes of such instruction each week, they would be considered to be $400 \times \frac{200}{1600^*} = 50.0$ full-time equivalent pupils. If the 400 pupils were enrolled in an IMMERSION FRENCH program in which they received 960 minutes per week of instruction in French, they would be equal to $400 \times \frac{960}{1600^*} = 240.0$ full-time equivalent pupils.

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*Total minutes per week of instruction.

FTE teachers were derived in the same manner, based on the amount of time they spent instructing a given subject. Their instructional load (teaching and preparation time assigned to a given discipline) was taken from the teacher workload survey which all teachers complete each year. This was undertaken for both June and December and subsequently prorated to arrive at a calendar year equivalent.

Once all second language program FTE pupils and teachers were calculated they were pooled to arrive at the total number of pupils and teachers receiving/giving instruction in the second language. These FTE pupils, teachers and their salaries were subsequently subtracted from the total system to arrive at regular non-French FTEs and salaries.

For example, if Board X contained 1,000 elementary pupils of which 25 were FTE CORE FRENCH and 50 were FTE IMMERSION FRENCH, the regular system must have contained 925 regular pupils:

		FRENCH PROGRAM			
	TOTAL SYSTEM	Core	Immersion	Total	REGULAR SYSTEM*
Pupils	1,000	25	50	75	925
Teachers	40	1	2.5	3.5	36.5
PTR	25.00	25.00	20.00	21.43	25.34
Teacher Salaries	$800,000	$22,000	$45,000	$67,000	$733,000

The regular system figures which are deduced assume that the staffing pattern (pupils/teacher) of the regular system is the one which would exist if no French were offered, and that pupils would attend the community school rather than a special school. These regular system figures are used to determine the additional costs as outlined below.

CALCULATION OF ADDITIONAL COSTS

Three types of additional costs were identified: instructional costs incurred in providing classroom instruction to pupils, ancillary costs

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*The total system minus the total French program.

incurred in providing supplementary services to program pupils and developmental costs incurred in developing a new program. Instructional costs are incurred in schools as they represent the most essential elements necessary to provide instruction - a teacher, instructional materials and transportation if necessary. Classification of these costs was requested by instructional level and school size to assess the effects, if any, that these have on the cost. Ancillary and developmental costs are discretionary as they are not essential in providing instruction to pupils. If they are incurred, they are provided to benefit the program on a system-wide basis. Their classification, therefore, was requested by instructional level only.

The procedures used to calculate the different types of costs are reported below.

INSTRUCTIONAL

- Teacher Salaries - All teacher salaries for second language programs are not "additional" as the absorption of the second language pupils by the regular system would require the employment of additional teachers if the pupil/teacher ratio (PTR) were to remain the same. As a teacher is required to instruct pupils regardless of the program in which they are enrolled, the additional teacher costs are determined by calculating what it would cost to instruct all second language pupils in English, and subtracting that amount from the actual costs to instruct them in a particular second language. For these calculations it has been assumed that additional English-speaking teachers would be employed at the average salary of present teachers, and that it would be necessary to maintain existing pupil/teacher ratios for English-language instruction in all school jurisdictions.

The following illustrates the calculation of the additional portion of the second language teachers' salaries:

	REGULAR SYSTEM	CORE FRENCH	TRANSFER OF PUPILS
Pupils	10,000	200	10,200
Teachers	450	10	450
PTR	22.22	20.00	22.67
Teacher Salaries	$9,675,000	$220,000	

If the CORE FRENCH pupils were added into regular programs, the PTR would increase from 22.22 to 22.67 thereby decreasing the attention each child receives by .0009 (1/22.22 = .0450, 1/22.67 = .0441) assuming that each child receives equal attention. Restoring the PTR to 22.22 would require an increase in staff of 9.05 teachers (10,200/22.22 = 459.05 - 450.0) which would cost $194,575 ($9,675,000/450 = $21,500 x 9.05 = $194,575). Therefore, the additional cost of teacher earnings for the CORE FRENCH program is $25,425 ($220,000 - $194,575). If the CORE FRENCH teachers' average salary were the same as that for the regular system the additional cost would be $20,425 ($21,500 x 10 - $194,575) because of the lower PTR for the CORE FRENCH program. The additional earnings part of instructional costs varies as a result of the average teacher salary and the number of pupils per teacher.

- Other Instructional - Included are: equipment, materials, transportation, other.

These are all "additional" if they are incurred specifically for the program. It is assumed that if the program did not exist, the pupils could be absorbed into regular programs without requiring the purchase of extra equipment or materials, and that the pupils would not incur additional transportation costs. This assumption would not be valid if there were a significantly greater amount of instructional time devoted to second languages in Alberta.

SYSTEM COSTS

Ancillary and developmental costs are incurred on a system-wide basis rather than at the school level. Analysis by school size did not apply.

- Ancillary - All ancillary costs are treated as additional as the related services are provided exclusively for the benefit of the second language program. Included are:
  - special activities
  - professional development
  - support staff
  - resource personnel
  - supervision

  Ancillary costs associated with staff providing services to more than one program were allocated to a specific program on the basis of time estimates provided by supervisors and/or superintendents in each board.

- Developmental - All developmental costs are treated as additional as they are incurred directly in the development of second language programs. Included are:
  - curriculum
  - assessment
  - other.

SYNOPSIS

This chapter has described the instruments used to collect the data from the five school jurisdictions. The boards were offered assistance as necessary to compile the data, subsequent to which selected personnel from each board were interviewed to provide clarification about the questionnaire items and further detail concerning the second language programs.

Pro rata numbers of teachers and pupils were derived from two school years so that these data would correspond to the financial data requested for the calendar year 1978. Calculation of the additional teacher salaries required for second language instruction entailed the conversion of second language teachers and pupils into full-time equivalents (FTE) based on the

number of minutes per week of instruction involved, thereby ascribing to them the same full-time status as teachers and pupils in the rest of the school system. By subtracting second language program FTE pupils, teachers and their salaries, it was possible to arrive at the cost of regular non-second language instruction. Hypothetical marginal costs of regular teachers were then determined assuming that the second language program pupils transferred into regular programs by calculating the extra regular teacher costs required to maintain the existing pupil/teacher ratios. By subtracting these costs from the actual cost of a particular second language program it was possible to arrive at the additional teacher cost.

Ancillary and developmental costs were incurred on a system-wide basis only. All attributed specifically to a second language program were additional.

CHAPTER IV

FINDINGS

This chapter reports the financial and non-financial findings of the study. Results are organized by program dimensions according to the three types of costs: instructional, ancillary and developmental. A final section presents the total additional costs for each program.

PROGRAM DIMENSIONS

The sample consisted of five Alberta school jurisdictions. The three urban boards have been labelled A, B and C; the two rural boards have been labelled D and E. All five boards offer a full complement of instructional levels with the exception of Board E which offers no senior high school program.

The five boards were chosen because of the diversity of second language programs and varying stages of adoption which they represent. All five offer CORE FRENCH for all instructional levels and IMMERSION FRENCH at the elementary level. EXTENDED FRENCH is offered by Boards A and D only while BILINGUAL FRENCH is offered solely by Board D. Of the five boards, only Boards A and B offer Ukrainian and German programs.

Table 5 presents the programs and their stages of adoption which were offered by each board in 1978. Except for Board A's junior high CORE FRENCH program, all second language CORE programs were in a maintenance stage during 1978. Both BILINGUAL UKRAINIAN programs were in an implementation stage. All of Board D's programs were in a maintenance stage.

Table 6 presents the distribution of second language programs according to school size. Most programs were offered in small or medium schools. No program at the elementary level was offered in a large school; the few at the secondary level were for Boards A and B only. These two boards were the

Table 5

Second Language Programs and their Stages of Adoption during 1978

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	Maintenance	Implementation	Maintenance
Board B Urban	Maintenance	Maintenance	Maintenance
Board C Urban	Maintenance	Maintenance	Maintenance
Board D Rural	Maintenance	Maintenance	Maintenance
Board E Rural	Maintenance	Maintenance	
EXTENDED FRENCH			
Board A Urban	Implementation		
Board D Rural	Maintenance	Maintenance	
BILINGUAL FRENCH			
Board D Rural	Maintenance	Maintenance	Maintenance
IMMERSION FRENCH			
Board A Urban	Implementation	Implementation	
Board B Urban	Maintenance	Maintenance	Maintenance
Board C Urban	Implementation		
Board D Rural	Maintenance		
Board E Rural	Implementation	Implementation	
CORE UKRAINIAN			
Board A Urban		Maintenance	Maintenance
Board B Urban		Maintenance	Maintenance
BILINGUAL UKRAINIAN			
Board A Urban	Implementation		
Board B Urban	Implementation		
CORE GERMAN			
Board A Urban		Maintenance	Maintenance
Board B Urban			Maintenance

Table 6

Distribution of Second Language Programs
According to School Size

Programs	Elementary			Junior High			Senior High		
	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
CORE FRENCH									
Board A Urban	✓	✓		✓	✓	✓	✓		✓
Board B Urban	✓	✓		✓	✓			✓	✓
Board C Urban	✓	✓			✓			✓	
Board D Rural	✓	✓		✓			✓	✓	
Board E Rural		✓			✓				
EXTENDED FRENCH									
Board A Urban	✓	✓							
Board D Rural	✓			✓					
BILINGUAL FRENCH									
Board D Rural	✓			✓				✓	
IMMERSION FRENCH									
Board A Urban		✓			✓	✓			
Board B Urban	✓	✓			✓			✓	
Board C Urban		✓							
Board D Rural	✓								
Board E Rural		✓			✓				
CORE UKRAINIAN									
Board A Urban					✓	✓			✓
Board B Urban					✓				✓
BILINGUAL UKRAINIAN									
Board A Urban		✓							
Board B Urban	✓	✓							
CORE GERMAN									
Board A Urban						✓	✓		✓
Board B Urban									✓

only two in the sample which had large secondary schools.

Table 7 presents the full-time equivalent (FTE) pupils in each second language program and the percentage this represents of all pupils in each system at each instructional level. For all boards, except A, more pupils were enrolled in the elementary French programs with a general decrease at each succeeding secondary level. In Board E, approximately a third of all FTE pupils took French at both the elementary and junior high levels (33.57 and 25.69 per cent, respectively). For the remaining boards, the total French pupils represented a much lower proportion of all pupils.

Table 8 presents the staffing patterns (pupils per teacher) for each second language program. While no consistency across all programs or boards appears evident, some uniformity existed across programs within boards. For both CORE and IMMERSION programs, there was a gradual decrease in the number of pupils per teacher from the elementary to the senior high instructional level for Boards B and E. While this pattern held for CORE FRENCH in Board D, it was reversed for the EXTENDED and BILINGUAL FRENCH programs in which teachers were responsible for increasingly more pupils from the elementary to the secondary levels; this was due largely to the very low enrolments* of the schools in which these elementary programs were located in this board.

Table 9 presents the staffing patterns (pupils per teacher) for the total system, the total French, total Ukrainian and total German programs and the total non-second language pupil/teacher ratios (PTR) for each board at all three instructional levels. This table provides some indication of the impact of the second language programs on the total system.

These tables describe the sample and indicate the dimensions of the study which apply. Due to the limited distribution of programs among the different school size classifications, information concerning this dimension is presented in Appendix C. Total costs only are reported in

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*Board D operated a few elementary schools whose enrolments were below 50 pupils.

Table 7

Full-Time Equivalent (FTE) Second Language Pupils and Percentage this Represents of All Pupils in Each System

Programs	Elementary FTE	Elementary %	Junior High FTE	Junior High %	Senior High FTE	Senior High %
CORE FRENCH						
Board A Urban	165.25	.59	526.15	3.38	503.11	3.26
Board B Urban	555.39	4.51	336.76	4.86	269.23	3.99
Board C Urban	55.85	5.47	12.37	1.93	13.41	2.47
Board D Rural	125.21	7.61	47.93	5.15	21.00	2.35
Board E Rural	24.04	6.25	14.37	6.22		
EXTENDED FRENCH						
Board A Urban	90.04	.32				
Board D Rural	10.32	.63	10.42	1.12		
BILINGUAL FRENCH						
Board D Rural	36.70	2.23	29.16	3.14	77.73	8.69
IMMERSION FRENCH						
Board A Urban	368.93	1.31	24.85	.16		
Board B Urban	809.60	6.58	283.20	4.09	139.23	2.06
Board C Urban	72.97	7.15				
Board D Rural	32.13	1.95				
Board E Rural	105.05	27.32	44.95	19.46		
CORE UKRAINIAN						
Board A Urban			21.70	.14	28.67	.19
Board B Urban			10.96	.16	21.10	.31
BILINGUAL UKRAINIAN						
Board A Urban	131.78	.47				
Board B Urban	108.18	.88				
CORE GERMAN						
Board A Urban			6.36	.04	98 68	64
Board B Urban					6.00	.09

Table 8

Staffing Patterns (Pupils/Teacher) of
Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	22.09	21.08*	21.30
Board B Urban	24.56	22.83	17.78
Board C Urban	24.50	24.74	22.35
Board D Rural	22.77	18.09	11.80
Board E Rural	24.04	14.37	
EXTENDED FRENCH			
Board A Urban	24.53*		
Board D Rural	5.19	16.28	
BILINGUAL FRENCH			
Board D Rural	9.79	22.43	27.08
IMMERSION FRENCH			
Board A Urban	21.71*	25.10*	
Board B Urban	23.11	20.23	18.20
Board C Urban	24.90*		
Board D Rural	26.55		
Board E Rural	24.83*	22.48*	
CORE UKRAINIAN			
Board A Urban		22.14	16.67
Board B Urban		21.92	26.37
BILINGUAL UKRAINIAN			
Board A Urban	22.37*		
Board B Urban	21.05*		
CORE GERMAN			
Board A Urban		9.49	17.01
Board B Urban			15.00

*Implementation Stage

Table 9

Staffing Patterns (Pupils/Teacher) for
Total System, Total French* and
Total Non-French**

Boards	Elementary	Junior High	Senior High
BOARD A URBAN			
Total System	22.38	23.55	22.10
Total French	22.18	21.23	21.30
Total Non-French	22.38	23.64	22.12
Total Ukrainian	22.37	22.14	16.67
Total Non-Ukrainian	22.38	23.55	22.11
Total German		9.49	17.01
Total Non-German		23.56	22.14
BOARD B URBAN			
Total System	20.00	21.33	20.34
Total French	23.67	21.56	17.92
Total Non-French	19.62	21.31	20.52
Total Ukrainian	21.05	21.92	26.37
Total Non-Ukrainian	19.99	21.33	20.38
Total German			15.00
Total Non-German			20.35
BOARD C URBAN			
Total System	21.09	24.06	22.41
Total French	24.72	24.74	22.35
Total Non-French	20.65	24.05	22.42
BOARD D RURAL			
Total System	19.93	18.78	17.21
Total French	16.41	19.07	21.23
Total Non-French	20.56	18.75	16.81
BOARD E RURAL			
Total System	20.97	19.52	
Total French	24.68	19.77	
Total Non-French	19.49	19.43	

*Also Ukrainian and German
**Also Non-Ukrainian and Non-German

this chapter to permit the presentation of data in a manner which makes possible comparisons among programs at the three instructional levels.

INSTRUCTIONAL COSTS

Two types of instructional costs have been identified in this study: teacher salaries and "other" costs associated with equipment, materials, transportation and related instructional expenditures. While the latter are all additional if they are incurred specifically and exclusively for the second language programs, the portion of teacher salaries which is additional is dependent on the cost of replacing the second language teachers (if the program did not exist) by regular teachers in order that the pupil/teacher ratio of the system without second language programs remains the same. All calculations were carried out within school size classifications, i.e., second language programs located in small schools were compared with regular programs in small schools. This assumes that pupils and teachers would remain in a school of comparable size (if not necessarily the same school) if the second language program did not exist. Totals were then determined by adding together individual school size calculations.

This section is divided into three parts: the first dealing with the additional teacher salaries, the second with "other" instructional costs and the third with the total additional instructional costs.

ADDITIONAL TEACHER SALARIES

Table 10 presents the additional teacher salaries for each second language program. The actual teacher salaries are reported in the cost schedules for each program presented in Appendix D. The most notable feature about the table is the fact that certain programs had negative additional costs (identified by bracketed figures). This indicates that if no second language program existed, the cost of maintaining the pupil/teacher ratios (PTR) of regular programs, after transferring second language program pupils, would in these cases, be higher than providing the individual

Table 10

Additional Teacher Costs for Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$<14,695>	$10,865*	$34,696
Board B Urban	<56,605>	<31,991>	<11,084>
Board C Urban	<14,517>	1,333	1,210
Board D Rural	<31,441>	28,755	14,100
Board E Rural	< 1,855>	< 554>	
EXTENDED FRENCH			
Board A Urban	<16,608>*		
Board D Rural	27,037	6,627	
BILINGUAL FRENCH			
Board D Rural	51,060	9,941	<23,006>
IMMERSION FRENCH			
Board A Urban	<55,069>*	664 *	
Board B Urban	43,529	58,990	19,872
Board C Urban	<26,988>*		
Board D Rural	2,109		
Board E Rural	< 3,618>*	<10,894>*	
CORE UKRAINIAN			
Board A Urban		< 2,178>	3,896
Board B Urban		715	< 6,217>
BILINGUAL UKRAINIAN			
Board A Urban	<20,151>*		
Board B Urban	26,123*		
CORE GERMAN			
Board A Urban		3,910	23,787
Board B Urban			2,902

*Implementation Stage

second language teachers. This applied to all elementary CORE FRENCH programs and all elementary programs in an implementation stage. However, all other elementary French programs (EXTENDED, BILINGUAL and IMMERSION) in a maintenance stage incurred additional costs for teacher salaries and benefits. At the junior high level, two of the five CORE FRENCH programs had negative costs as did one of the three IMMERSION FRENCH programs; all other French programs had additional costs for teachers. No consistencies were evident at the senior high level. While all CORE GERMAN programs incurred additional teacher costs, Ukrainian programs did not exhibit a similar pattern.

This negative cost balance is explained by two factors: the different staffing patterns (pupils/teacher) of the regular system (total system minus total French/Ukrainian/German), and the average earnings of the teachers. Generally, the second language teachers earned less than the regular teachers due to fewer years of teaching experience. As school boards increasingly hire inexperienced specialized staff for second language programs, the effect is that regular staff have proportionately more years of experience than second language teachers. The specialized program staff cost relatively less because they are more junior in relation to regular staff who are more experienced, therefore, more expensive. Furthermore, staffing patterns account for a difference in costs. If the PTRs are equivalent, the difference in cost will be reflected only in the difference in average salaries whereas if the PTRs are different, this will also affect the cost. The magnitude of the amount depends on the number of pupils involved.

"OTHER" INSTRUCTIONAL COSTS

Table 11 presents the additional instructional costs incurred for equipment, materials, transportation and other related expenditures for each program. In general, relatively little was spent specifically for the CORE programs which were all, with the exception of Board A's junior high CORE FRENCH program, in a maintenance stage. In most cases, expenditures were incurred for materials only. Programs in an implementation stage tended to incur more costs due to the acquisition of instructional

Table 11

"Other" Additional Instructional Costs for Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$	$22,563*	$21,510
Board B Urban			1,860
Board C Urban	1,067	663	429
Board D Rural	4,433	1,791	626
Board E Rural	185	656	
EXTENDED FRENCH			
Board A Urban	36,797*		
board D Rural	2,370	1,670	
BILINGUAL FRENCH			
Board D Rural	2,202	1,399	1,169
IMMERSION FRENCH			
Board A Urban	28,543*	750*	
Board B Urban	101,516	73,540	38,357
Board C Urban	13,846*		
Board D Rural	478		
Board E Rural	4,135*	1,850*	
CORE UKRAINIAN			
Board A Urban			80
Board B Urban		375	375
BILINGUAL UKRAINIAN			
Board A Urban	7,537*		
Board B Urban	58,159*		
CORE GERMAN			
Board A Urban		24	991
Board B Urban			400

*Implementation Stage

materials and the transportation of pupils to schools offering BILINGUAL and IMMERSION programs.

Board B's IMMERSION FRENCH programs were particularly expensive. This Board is the only one of the five jurisdictions which offers an articulated immersion program across all instructional levels. It provided transportation to all pupils who had to leave their community school in order to attend the immersion centres. This situation differs from the other boards which are implementing new programs where the number of pupils is smaller and therefore incur a lower transportation cost. Board D offers a BILINGUAL FRENCH program in a maintenance stage but it does so within an area where pupils are bussed regardless of program, and therefore transportation for the French program is not an additional cost.

TOTAL INSTRUCTIONAL COSTS

Table 12 presents the total instructional costs for each second language program. Adding the "other" instructional costs to that of the additional teacher salaries did not tend to eliminate negative cost balances. Since the CORE FRENCH programs did not incur many expenses, the balance for most of them tended to remain negative, i.e., costing less than replacing the second language teachers with regular teachers if the pupils were absorbed by the regular system. Only three programs with negative additional teacher costs had overall additional costs: Board E's junior high CORE FRENCH program, Board A's elementary EXTENDED FRENCH program, and Board E's elementary IMMERSION FRENCH program; the latter two were both in an implementation stage.

Instructional costs depended principally on the cost of the teacher. If staffing patterns and average earnings were identical, there would be no additional cost in providing second language programs. However, as these two factors varied, so did costs. The other cost elements comprising instructional costs depended on the total number of pupils involved and the expenses incurred.

Table 12

Total Instructional Costs for Each Second Language Program

Program	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$<14,695>	$33,428*	$56,206
Board B Urban	<56,605>	< 31,991>	< 9,224>
Board C Urban	<13,450>	1,996	1,639
Board D Rural	<26,978>	30,546	14,726
Board E Rural	< 1,670>	102	
EXTENDED FRENCH			
Board A Urban	20,189*		
Board D Rural	29,407	8,297	
BILINGUAL FRENCH			
Board D Rural	53,262	11,340	<21,837>
IMMERSION FRENCH			
Board A Urban	<26,526>*	1,414 *	
Board B Urban	145,045	132,530	58,229
Board C Urban	<13,142>*		
Board D Rural	2,587		
Board E Rural	517*	< 9,044 >*	
CORE UKRAINIAN			
Board A Urban		< 2,178 >	3,976
Board B Urban		1,090	< 5,842 >
BILINGUAL UKRAINIAN			
Board A Urban	<12,614>*		
Board B Urban	84,282*		
CORE GERMAN			
Board A Urban		3,934	24,778
Board B Urban			3,302

*Implementation Stage

SYSTEM COSTS

Certain costs are incurred for programs on a system-wide basis and depend entirely on board policy and perceived need. If the services which incur the costs are provided, additional funds are allocated to a specific program. Both ancillary and developmental costs are system costs which can be attributed to a particular instructional level but not necessarily to a specific school. As a result, ancillary and developmental costs are reported by level only.

ANCILLARY COSTS

Ancillary costs are incurred for special activities, professional development, support staff, resource personnel and supervision. Financial allocations to each are reported in the cost schedules for every program presented in Appendix D.

Table 13 presents the total ancillary costs for each second language program. A general tendency across all program variations was to expend more at the elementary level than at either secondary level. This might be anticipated as the boards generally had the greatest number of French pupils at the elementary level with decreasing numbers at the junior and senior high levels. In most cases, substantially more financial support was provided to the IMMERSION programs than the other types. This was due largely to the support staff provided for the elementary programs for both BILINGUAL and IMMERSION programs.

All boards provided some consultative staff for the second language programs. For CORE programs, this was often the only ancillary service provided. Two CORE programs incurred no ancillary expenses at all, Board A's junior high UKRAINIAN program and Board B's senior high GERMAN program.

Programs in an implementation stage tended to incur more expenditures accounted for by the number of services provided. In addition to support staff and supervision, boards tended to provide professional development activities for the teachers and special activities for the pupils. Considerable financial support was also provided to Board B's IMMERSION

Table 13

Total Ancillary Costs for Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$7,145	$40,969*	$59,684
Board B Urban	7,482	7,482	7,482
Board C Urban	1,062	177	177
Board D Rural	8,158	2,844	245
Board E Rural	3,677	1,742	
EXTENDED FRENCH			
Board A Urban	30,036*		
Board D Rural	1,237	825	
BILINGUAL FRENCH			
Board D Rural	35,142	1,147	1,421
IMMERSION FRENCH			
Board A Urban	141,498*	10,740*	
Board B Urban	187,459	78,877	60,147
Board C Urban	10,709*		
Board D Rural	3,093		
Board E Rural	3,386*	1,652*	
CORE UKRAINIAN			
Board A Urban			4,090
Board B Urban		5,050	5,050
BILINGUAL UKRAINIAN			
Board A Urban	36,332*		
Board B Urban	33,628*		
CORE GERMAN			
Board A Urban		2,008	10,026
Board B Urban			

FRENCH programs (maintenance stage); the reasons for this are the same as for programs in an implementation stage - more services provided to the programs.

DEVELOPMENTAL COSTS

Developmental costs are incurred for curriculum, assessment and other developmental expenditures. Financial allocations to each are reported in the cost schedules for every program presented in Appendix D.

Table 14 presents the total developmental costs for each second language program. While all boards except C reported some developmental costs, the amount in most cases was accounted for directly by the acquisition of curricular materials. Programs in an implementation stage tended to incur more expenditures in this type of cost; this would be anticipated as programs tend to be developed and implemented concurrently. Once a program reaches the maintenance stage, the majority of the developmental effort has been completed although new materials are purchased and/or developed on a smaller scale than during the implementation stage.

TOTAL ADDITIONAL COSTS

Table 15 presents the total instructional, ancillary, and developmental costs for each second language program at the elementary level. Of the CORE FRENCH programs, only Board E's program incurred sufficient ancillary and developmental costs to result in a total additional cost; for the others, the ancillary and developmental costs served only to reduce the negative balance attributed to teacher salaries. The other program in which a negative balance remained was Board C's IMMERSION FRENCH program. In all other instances, the ancillary and developmental costs produced a net additional cost for the second language programs. Generally speaking, the greater the amount of French provided the greater the total additional cost.

Table 14

Total Developmental Costs for Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$	$7,750*	$ 120
Board B Urban	3,600	2,350	3,200
Board C Urban			
Board D Rural	2,826	1,210	363
Board E Rural	451	246	
EXTENDED FRENCH			
Board A Urban	7,404*		
Board D Rural	122	183	
BILINGUAL FRENCH			
Board D Rural	372	344	461
IMMERSION FRENCH			
Board A Urban	36,644*	9,071*	
Board B Urban	13,464	6,444	4,576
Board C Urban			
Board D Rural	111		
Board E Rural	1,123*	246*	
CORE UKRAINIAN			
Board A Urban		100	100
Board B Urban			
BILINGUAL UKRAINIAN			
Board A Urban	8,566*		
Board B Urban	12,166*		
CORE GERMAN			
Board A Urban		100	100
Board B Urban			

*Implementation Stage

Table 15

Total Additional Costs for Each Elementary Second Language Program

Programs	Instructional	Ancillary	Developmental	TOTAL
CORE FRENCH				
Board A Urban	$<14,695>	$ 7,145	$	$< 7,550>
Board B Urban	<56,605>	7,482	3,600	<45,523>
Board C Urban	<13,450>	1,062		<12,388>
Board D Rural	<26,978>	8,158	2,826	<15,994>
Board E Rural	< 1,670>	3,677	451	2,458
EXTENDED FRENCH				
Board A Urban	20,189	30,036	7,404	57,629
Board D Rural	29,407	1,237	122	30,766
BILINGUAL FRENCH				
Board D Rural	53,262	35,142	372	88,776
IMMERSION FRENCH				
Board A Urban	<26,526>	141,498	36,644	151,616
Board B Urban	145,045	187,459	13,464	345,968
Board C Urban	<13,142>	10,709		< 2,433>
Board D Rural	2,587	3,093	111	5,791
Board E Rural	517	3,386	1,123	5,026
BILINGUAL UKRAINIAN				
Board A Urban	<12,614>	36,332	8,566	32,284
Board B Urban	84,282	33,628	12,166	130,076

Table 16 presents the instructional,ancillary and developmental costs for each second language program at the junior high level. Three programs retained a negative balance after all costs were considered: Board B's CORE FRENCH program, Board E's IMMERSION FRENCH program and Board A's CORE UKRAINIAN program. All others resulted in an additional cost.

Table 17 presents the instructional, ancillary, and developmental costs for each senior high second language program. Two retained a negative balance after all costs were considered: Board D's BILINGUAL FRENCH program and Board B's CORE UKRAINIAN program.

Table 18 summarizes the preceding tables, reporting the total additional cost for each program. CORE FRENCH programs did not incur the additional costs that the other programs did. Of the fourteen CORE FRENCH programs, nine incurred additional costs ranging from a low of $1,458 to a high of $116,010. For CORE UKRAINIAN programs, two incurred additional costs while two did not. All three CORE GERMAN programs incurred additional costs. Of the six EXTENDED and BILINGUAL FRENCH programs, all incurred additional costs except Board D's senior high BILINGUAL FRENCH program when all costs were included. Two of the nine IMMERSION FRENCH programs did not incur additional costs when all costs were considered, Board C's elementary program and Board E's junior high program.

SYNOPSIS

This chapter has presented a description of the sample and reported the findings. Instructional costs, representing the cost of providing basic instruction to pupils, depended primarily on teacher salaries. Whether or not second language teachers' salaries were additional depended on the staffing patterns and differing program average salaries of teachers in a particular school. Second language teachers tended to earn less than regular teachers which often resulted in a negative cost balance. The addition of other instructional expenditures to the negative teacher costs tended not to offset the negative balances resulting in an overall negative

Table 16

Total Additional Costs for Each Junior High Second Language Program

Programs	Instructional	Ancillary	Developmental	TOTAL
CORE FRENCH				
Board A Urban	$33,428	$40,969	$7,750	$82,147
Board B Urban	<31,991>	7,482	2,350	<22,159>
Board C Urban	1,996	177		2,173
Board D Rural	30,546	2,844	1,210	34,600
Board E Rural	102	1,742	246	2,090
EXTENDED FRENCH				
Board D Rural	8,297	825	183	9,305
BILINGUAL FRENCH				
Board D Rural	11,340	1,147	344	12,831
IMMERSION FRENCH				
Board A Urban	1,414	10,740	9,071	21,225
Board B Urban	132,530	78,877	6,444	217,851
Board E Rural	<9,044>	1,652	246	<7,146>
CORE UKRAINIAN				
Board A Urban	<2,178>		100	<2,078>
Board B Urban	1,090	5,050		6,140
CORE GERMAN				
Board A Urban	3,934	2,008	100	6,042

Table 17

Total Additional Costs for Each Senior High Second Language Program

Programs	Instructional	Ancillary	Developmental	TOTAL
CORE FRENCH				
Board A Urban	$56,206	$59,684	$ 120	$116,010
Board B Urban	<9,224>	7,482	3,200	1,458
Board C Urban	1,639	177		1,816
Board D Rural	14,726	245	363	15,334
BILINGUAL FRENCH				
Board D Rural	<21,837>	1,421	461	<19,955>
IMMERSION FRENCH				
Board B Urban	58,229	60,147	4,576	122,952
CORE UKRAINIAN				
Board A Urban	3,976	4,090	100	8,166
Board B Urban	<5,842>	5,050		< 792>
CORE GERMAN				
Board A Urban	24,778	10,026	100	34,904
Board B Urban	3,302			3,302

Table 18

Total Additional Cost for Each Second Language Program

Programs	Elementary	Junior High	Senior High
CORE FRENCH			
Board A Urban	$< 7,550>	$82,147*	$116,010
Board B Urban	<45,523>	<22,159>	1,458
Board C Urban	<12,388>	2,173	1,816
Board D Rural	<15,994>	34,600	15,334
Board E Rural	2,458	2,090	
EXTENDED FRENCH			
Board A Urban	57,629*		
Board D Rural	30,766	9,305	
BILINGUAL FRENCH			
Board D Rural	88,776	12,831	<19,955>
IMMERSION FRENCH			
Board A Urban	151,616*	21,225*	
Board B Urban	345,968	217,851	122,952
Board C Urban	< 2,433>*		
Board D Rural	5,791		
Board E Rural	5,026*	< 7,146>*	
CORE UKRAINIAN			
Board A Urban		< 2,078>	8,166
Board B Urban		6,140	< 792>
BILINGUAL UKRAINIAN			
Board A Urban	32,284*		
Board B Urban	130,076*		
CORE GERMAN			
Board A Urban		6,042	34,904
Board B Urban			3,302

*Implementation Stage

cost balance.

Ancillary costs were incurred most extensively at the elementary level. Substantial financial support was provided to the IMMERSION FRENCH and BILINGUAL (FRENCH and UKRAINIAN) programs. This was due largely to the support staff provided for these programs at the elementary level. CORE programs tended to receive the services of consultative staff only. Programs in an implementation stage tended to incur more ancillary costs; in addition to support staff and supervision, boards provided professional development activities for teachers and special activities for the pupils.

Developmental costs were incurred by all boards except one. In most cases, the entire amount was attributable to the acquisition of curricular materials. Few materials were developed for specific programs.

When all additional costs were combined, some programs retained a negative cost balance which resulted from the cost of the teacher. The total additional amount spent on any program depended largely on the extent of ancillary services provided.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter is divided into two sections. The first provides a summary of the purposes, the methodology, and the findings of the study. The second section provides the conclusions and recommendations arising from the investigation.

SUMMARY

PURPOSES

The primary purpose of the study was to identify and explain the additional costs incurred by Alberta school jurisdictions providing instruction in a second language during the calendar year 1978. The specific questions addressed were as follows:

- What are the costs associated with instruction in each of French, Ukrainian and German?
- How do costs vary as a function of program type within each second language (CORE, EXTENDED, BILINGUAL, IMMERSION)?
- What are the costs associated with the stages of program adoption (development, implementation, maintenance)?
- How do costs vary as a result of instructional level (elementary, junior high, senior high)?
- How do costs vary as a result of school size (small, medium, large)?
- How do costs vary as a result of school setting (urban, rural)?

A secondary purpose of the study was to identify areas where the program accounting procedures maintained by school jurisdictions were inadequate in providing the cost data required in this investigation and to recommend corrective action.

METHODOLOGY

The study was conducted in two stages. The first stage identified cost types and developed methodological procedures. The primary sources of information were literature on other second language cost studies and the perceptions of second language educators. The second stage consisted of collecting and analyzing the data and determining the additional costs associated with each second language program.

Additional costs are defined as those which would not have been incurred had the second language program not been in existence. Three types of costs were identified: instructional costs incurred in providing classroom instruction to pupils, ancillary costs incurred in providing supplementary services to program pupils and developmental costs incurred in developing a new program. The elements comprising each cost type are:

Instructional	Ancillary	Developmental
Teacher Salaries	Special Activities	Curriculum
Equipment	Professional Development	Assessment
Materials	Support Staff	Other
Transportation	Resource Personnel	
Other	Supervision	

- Instructional costs are basic to all programs which have reached the implementation stage as they represent the cost of the teacher, the instructional materials necessary to present the curriculum, and the cost of transporting, where necessary, the pupils to the teacher. Certain second language program teacher costs are not classified as additional as explained later. The other elements included under instructional costs are all considered additional if they are provided specifically for a second language program without benefit to non-program pupils.

- Ancillary costs are all additional as they would not be incurred without the existence of the program. The supplementary services they represent are provided specifically for a particular program. These costs are

discretionary in that the related services are not essential in offering a program; whether or not they are provided depends on their need as perceived by the school board.

- Developmental costs are all additional as they are incurred for the development of a particular program. Their magnitude is dependent on the variety and extent of the developmental effort expended in initiating a program.

Once the cost types were identified, a questionnaire was designed to elicit information about the costs incurred by school jurisdictions operating second language programs. A draft questionnaire was reviewed by second language educators for omissions and revisions and another draft was field-tested with a large jurisdiction. Copies of the questionnaire were sent to the twenty-three school jurisdictions offering second language programs in 1978 under Section 150(1)(a) and (b) of the School Act.

Five school jurisdictions were selected for intensive study. They were chosen on the basis of the diversity of programs offered, and the varying stages of adoption and school setting which they represented. These five boards were provided with assistance as necessary in the compilation of data according to the research questions, i.e., program type, stage of adoption, instructional level, and school size. Once the data had been compiled, the information was reviewed for completeness and possible areas of misinterpretation. Interviews with selected personnel from each of the five boards were arranged to provide clarification of the questionnaire items and on specific details concerning the second language programs offered.

As the calendar year 1978 encompassed portions of two school years, 1977-1978 and 1978-1979, the number of pupils and teachers reported for June, 1978 and December, 1978 were prorated to arrive at a calendar year equivalent. The pro rata numbers for 1978 were derived by assigning a weight of .67 to June and .33 to December so that full-time equivalent calculations would correspond to the financial data requested for the calendar year 1978.

As a teacher is required to instruct pupils regardless of the program in which they are enrolled, all teacher costs cannot be considered additional. The additional teacher costs are determined by calculating what it would cost to instruct all second language pupils in English, and subtracting that amount from the actual costs to instruct them in the second language. For these calculations, it has been assumed that additional English-speaking teachers would be employed at the average salary of present teachers, and that it would be necessary to maintain existing pupil/teacher ratios for English-language instruction in all school jurisdictions.

In order to calculate the additional teacher salaries and benefits for second language instruction, it was necessary to convert all second language pupils and teachers to full-time equivalents (FTE) based on the number of minutes per week of second language instruction involved, thereby ascribing to them the same full-time status as pupils and teachers in the rest of the school system. The teachers' instructional load included both instruction and preparation time utilized in a second language program. The second language program FTE pupils, teachers and their salaries were subtracted from the total system figures to arrive at regular non-second language FTEs and earnings. Pupil/teacher ratios and average teacher salaries and benefits were calculated for each of the second language programs and for regular school programs. Hypothetical marginal regular program teacher costs were then determined by assuming a transfer of all second language FTE pupils to regular programs and calculating the extra regular program teacher costs which would be required to maintain existing pupil/teacher ratios at average salaries and benefits. These hypothetical marginal regular teacher costs were deducted from the actual second language teacher costs to arrive at the additional second language teacher costs. In certain cases, this calculation resulted in negative additional second language costs, due in part to lower average teacher salaries and/or higher pupil/teacher ratios for second language programs.

As ancillary and developmental costs are incurred on a system-wide basis rather than at the school level, analysis by school size did not apply. Ancillary costs associated with staff providing services to more than one

program were allocated to a specific program on the basis of time estimates by each school board.

FINDINGS

Table 19 presents a summary of the programs offered. Three of the five boards subject to intensive study (one urban and two rural) offered French programs only while two urban boards also offered Ukrainian and German programs. With one exception, all five boards offered CORE FRENCH at all instructional levels and IMMERSION FRENCH at the elementary level. At two boards (one rural and one urban), all French programs were in a maintenance stage; at the other three boards, the programs providing increasing instructional time in French (EXTENDED and IMMERSION) were in an implementation stage. Both elementary BILINGUAL UKRAINIAN programs were in an implementation stage. With one exception, all CORE programs were in a maintenance stage.

The number of full-time equivalent pupils in any particular second language program ranged from a low of .04 per cent of all students at one board to a high of 27.32 per cent. All FTE French pupils combined for any jurisdiction ranged from 2.22 to 33.57 per cent at the elementary level, 1.93 to 25.69 per cent at the junior high level and 2.47 to 11.03 per cent at the senior high level.

Table 19

Summary of the Number of Intensive-Study Boards Offering Second Language Programs in 1978

Program Type	Elementary	Junior High	Senior High
CORE			
French	5	5	4
Ukrainian	-	2	2
German	-	1	2
EXTENDED			
French	2	1	-
BILINGUAL			
French	1	1	1
Ukrainian	2	-	-
IMMERSION			
French	5	3	1

The staffing patterns for each program revealed few consistencies across programs or instructional levels. Two boards (one urban and one rural) had generally fewer pupils per teacher across instructional levels for both CORE and IMMERSION FRENCH programs.

- Instructional Costs - ALL CORE FRENCH programs at the elementary level had negative additional teacher costs, i.e., cost savings, indicating that the cost of the teachers was less than the potential cost of replacing them with regular teachers. This finding held for all elementary French programs in an implementation stage. However, all other elementary programs (EXTENDED, BILINGUAL and IMMERSION) in a maintenance stage incurred additional costs for teacher salaries and benefits. At the junior high level, two of the five CORE FRENCH programs had negative costs as did one of the three IMMERSION FRENCH programs; all other French programs had additional costs for teachers.

  When additional teacher costs and other instructional costs were combined, only three programs with negative additional teacher costs had overall additional costs: a rural junior high CORE FRENCH program, the urban elementary EXTENDED FRENCH program, and a rural elementary IMMERSION FRENCH program.

  Examination of the instructional costs incurred for equipment, materials, transportation and other related expenditures revealed some consistencies across programs, stages and instructional levels. In general, progressively less was spent by all boards on these items advancing from the elementary to the secondary levels, as the result of a decreasing pattern in the FTE pupils. Expenditures by the largest board for junior high (implementation) and senior high (maintenance) CORE FRENCH programs reflected increasing costs. All programs in an implementation stage incurred considerable additional expenditures. The urban board providing an articulated IMMERSION FRENCH program (maintenance) across all instructional levels expended substantial additional funds for instructional purposes; the single most costly item for this program at all instructional levels was transportation. While the other two urban boards

also provided transportation for the IMMERSION FRENCH program, the total amount spent was considerably less due to the fewer number of pupils involved. While the rural boards also provided transportation, this was not an additional cost to the French program as pupils required this service regardless of language of instruction.

- System Costs - While instructional costs (representing the cost of providing pupils with basic classroom instruction which requires a teacher and may include instructional materials and transportation) are incurred in individual schools, some costs are incurred for programs on a system-wide basis and depend on board policy and perceived program needs. If these additional services are provided, additional funds are allocated to specific programs. Both ancillary and developmental costs are system costs which can be attributed to a particular instructional level but not to a specific school. Ancillary costs are incurred for special activities, professional development, support staff, resource personnel and supervision; developmental costs are incurred for curriculum, assessment and other related expenditures.

Analysis of ancillary costs revealed a general trend across programs to spend more at the elementary than at either secondary level. Furthermore, substantially more financial support was provided to the IMMERSION FRENCH and BILINGUAL (FRENCH and UKRAINIAN) programs than to other programs; this was due largely to the support staff provided for these programs at the elementary level. All boards provided some consultative staff for the second language program. For CORE programs (maintenance) this was often the only ancillary service provided. Programs in an implementation stage tended to incur more ancillary costs; in addition to support staff and supervision, boards provided professional development activities for teachers and special activities for pupils. The fully articulated IMMERSION FRENCH program (maintenance) also received considerable financial support across all instructional levels.

Four boards reported developmental costs; for most programs these costs were incurred for the acquisition of curricular materials. Staff from

three boards also developed materials, primarily for programs in an implementation stage. Generally, more expenditures were incurred for programs in the implementation than the maintenance stage; this was anticipated as programs are often developed and implemented concurrently.

Table 20 presents the total additional cost for all programs offered by the five boards in the sample in 1978. When all program variations were added together the collective additional cost for the five boards was $1,412,718.

Table 20

Summary of Total Additional Cost for Second Language Programs Offered by Intensive-Study Boards in 1978

Program Type	Elementary	Junior High	Senior High
CORE			
French	$<78,997>	$98,851	$134,618
Ukrainian	-	4,062	7,374
German	-	6,042	38,206
EXTENDED			
French	88,395	9,305	-
BILINGUAL			
French	88,776	12,831	<19,955>
Ukrainian	162,360	-	-
IMMERSION			
French	505,968	231,930	122,952
TOTAL	$766,502	$363,021	$283,195

CONCLUSIONS AND RECOMMENDATIONS

Given the disparity among the five boards with respect to the areas under investigation in the present study, few conclusions can be drawn; the findings, however, uncovered issues which merit further investigation.

The single most expensive item of providing instruction to pupils was the cost of the teacher. Whether or not the cost of teachers in a specific second language program was additional depended primarily on differences between the program examined and the regular system with respect to the staffing pattern (pupils/teacher) and average salaries. If the staffing patterns and average salaries were identical, the second language teacher costs would be the same as for the regular programs. Furthermore, location of the program also affected teacher costs; while new programs can be physically located to ensure optimal staff deployment, existing programs in established schools are subject to the vagaries of pupil enrolment. Examining teacher costs in depth by systematically manipulating the variables could provide meaningful data on which to project expenditures.

- INVESTIGATE THE EFFECTS ON TEACHER COSTS OF VARYING PUPIL ENROLMENT, TEACHER DEPLOYMENT AND AVERAGE TEACHER SALARIES.

Second language programs do not exist in isolation. While this study acknowledged the importance of location by comparing teacher costs within schools of comparable size (which often meant the same school), the impact of the program's existence on a school was not investigated. The educational milieu of a school depends on many factors, among them the number of other elective programs which might be offered, entailing an element of opportunity cost. Information of this type is especially important for programs which provide increasing instructional time in the second language (EXTENDED, BILINGUAL and IMMERSION) because of the extensive resources used. Research into the impact of second language programs on a school would complement the findings of this study.

- INVESTIGATE THE IMPACT OF SECOND LANGUAGE PROGRAMS ON THE ORGANIZATION OF SCHOOLS IN TERMS OF THE USE OF PHYSICAL AND HUMAN RESOURCES EXPENDED AND OPPORTUNITY COST.

While CORE programs are generally comparable to other elective programs with respect to instructional time, the EXTENDED, BILINGUAL and IMMERSION programs provide a higher degree of instructional contact with school subjects in the second language. This requires instructional materials in the second language of subject matter which would otherwise be presented in English. This duplication of materials then becomes an additional cost to the specific second language program. As the programs in an implementation stage generally increase by one grade each year, the potential annual additional cost for instructional materials can only be surmised. Evidence from the study concerning the fully articulated BILINGUAL and IMMERSION FRENCH programs suggest that these additional costs become substantial.

Moreover, the growth of programs, by virtue of the increasing number of pupils involved, may necessitate the establishment of language centres. Program accessibility, involving costs of transportation, then becomes a major factor. The findings of the study indicated the extent of the additional costs resulting from organizational differences between the alternative second language programs and the regular system during 1978. Replicating the study in future years would provide comparative data as programs expand and move from an implementation to a maintenance stage.

- REPLICATE THE STUDY IN FUTURE YEARS.

Arising from the diversity among boards with respect to the variety and extent of ancillary services provided is the question of their benefit to the pupils, i.e., do pupils receiving more services enjoy a better education? This study did not address the question of the quality of education provided by the alternative second language programs. While costs and quality cannot be equated, the question remains concerning the value of ancillary services. It is recommended, therefore, that Alberta Education establish a mechanism to address this issue.

- ESTABLISH A MECHANISM TO EXAMINE THE REQUIREMENTS FOR PROVIDING A SOUND EDUCATION IN A SECOND LANGUAGE.

Subsequent to the above, the dollar costs could be estimated. Should consensus exist among concerned parties with respect to the necessary components, the cost of "model" second language program variations could be projected. This would provide boards with alternatives which have dollar

figures attached permitting them to make choices which would correspond to amounts they have to spend.

- INVESTIGATE THE COSTS OF PROVIDING HYPOTHETICAL "MODEL" SECOND LANGUAGE PROGRAM ALTERNATIVES.

The present investigation determined a total additional cost, comprised of instructional, ancillary and developmental costs, for the second language programs offered by only five boards in 1978. Subsequent program expansion and maturation have undoubtedly increased these amounts, not only for the sample boards, but for others offering second language programs in Alberta as well.

Determination of an annual component of second language program costs required diligent effort as the accounting and record-keeping procedures maintained by some jurisdictions were inadequate in providing the data required in this investigation. Alberta school jurisdictions are legally required to maintain financial data to the functional level only, which for purposes of this study were not sufficiently detailed. Consequently, considerable manual effort was required to assign costs to specific second language programs. All jurisdictions in the sample were able to provide data at the sub-program level (French, German, Ukrainian). The element level, providing detail about specific program variations (CORE, EXTENDED, BILINGUAL, IMMERSION) was rarely employed. It was, therefore, necessary to examine the records of individual teachers in individual schools in order to attribute the instructional costs to a specific program.

Maintaining both financial and program data relevant to specific program alternatives would have considerably simplified collection of the data. For subsequent studies of this nature, school jurisdictions should be alerted in advance of the type of data required so that the task can be more readily accomplished. For programs offering increased instructional contact in the second language it is important that the cost of subject matter taught in either English or the second language be accurately attributed. This would permit better decisions about costs and, therefore, program planning. In this manner, all processes of the Planning, Programming, Budgeting Evaluation System (PPBES) would be possible.

- ENCOURAGE SCHOOL JURISDICTIONS TO MAINTAIN ACCOUNTING RECORDS TO THE ELEMENT LEVEL SO THAT EXPENDITURES ARE ATTRIBUTED TO SPECIFIC PROGRAMS.

If more detailed accounting records were maintained province-wide, determination of the comprehensive additional cost of second language instruction would be possible. Such analysis would permit a broader estimation of actual costs over an extended period of time (three or five years), which would reduce variations among boards which may have occurred during one year.

- INVESTIGATE THE COMPREHENSIVE ADDITIONAL COST OF SECOND LANGUAGE PROGRAMS OVER A THREE OR FIVE YEAR PERIOD.

It is the boards themselves which determine the costs of specific programs. The following quotation succinctly summarizes the conclusions of the present investigation.

> Costs are not intrinsic to the program or curriculum, but depend on choices made about the organization of people and materials which deliver the program to the students and about the buildings and support services which provide space and the amenities which facilitate delivery of the program message.
>
> MacNab and Unitt(1978:284-285)

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APPENDIX A

QUESTIONNAIRE

COSTS OF SECOND LANGUAGE INSTRUCTION

QUESTIONNAIRE

This questionnaire is designed to elicit information about the costs Alberta school jurisdictions incur when implementing instruction in a second language. Please provide cost data for the calendar year January 1 to December 31, 1978. Please clarify any information which you feel may be misinterpreted or not thoroughly understood. You may wish to append a detailed explanation of the cost figures for your jurisdiction.

The questionnaire is divided into four major sections:

A Total School Jurisdiction Information

B Second Language Instruction

C Second Language Support Staff

D Second Language Program Development

The questions related to costs follow the first and second level object codes of the PAB classification system. The major categories are:

1) Earnings - salaries and benefits
2) Supplies and Materials
3) Equipment
4) Transportation

The following definitions apply in this questionnaire:

PROGRAM TYPES

1) CORE - a program in which the second language is taught as a subject for a period of time comparable to other school subjects.

2) EXTENDED - a program in which the second language is taught as a subject and in addition one other subject (art, music, social studies, etc.) is taught in the second language.

3) BILINGUAL - a program in which the second language is taught as a subject and two or more other subjects are taught in the second language so that students are instructed in the second language up to a maximum of 50% of the time.

4) IMMERSION - a program in which the students are instructed in the second language over 50% of the time.

PROGRAM STAGES

1) DEVELOPMENT - the earliest stage in which a program is developed, curricular and assessment materials are acquired and examined, and additional materials are developed and/or revised to meet the needs of the program.

2) IMPLEMENTATION - the next stage in which the program materials which have been developed are field-tested on a system-wide basis by the teachers in the schools.

3) MAINTENANCE - the final stage in which the program is operating in the schools and requires only minimal assistance to enable it to continue operation.

SCHOOL SIZE

1) SMALL - a school which has fewer than 200 students.

2) MEDIUM - a school which has 200 to 599 students.

3) LARGE - a school which has more than 600 students.

INSTRUCTIONAL LEVEL

1) **ELEMENTARY** - grades 1 to 6.

2) **JUNIOR HIGH SCHOOL** - grades 7 to 9.

3) **SENIOR HIGH SCHOOL** - grades 10 to 12.

Please provide the following information:

School Jurisdiction _____

Person(s) completing the questionnaire.

Name	Questionnaire Section	Telephone Number

* * * * * *

THANK YOU FOR YOUR COOPERATION

A TOTAL SCHOOL JURISDICTION INFORMATION

1(a). Indicate the total number of full-time equivalent (FTE) teachers* and students by school size and instructional level for your jurisdiction on June 30, 1978.

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

1(b). Indicate the total number of full-time equivalent (FTE) teachers* and students by school size and instructional level for your jurisdiction on December 31, 1978.

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

* Include only those teachers actually instructing students. Exclude all non-teaching administrators and support staff at both the school and system levels.

A TOTAL SCHOOL JURISDICTION INFORMATION

2. Indicate the total earnings (salaries and fringe benefits) of the FTE teachers* for 1978.

SCHOOL SIZE	LEVEL			
	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 -9)	SENIOR HIGH SCHOOL (10 - 12)	TOTAL
Small (0 - 199)				
Medium (200 - 599)				
Large (Over 600)				

3. Provide the total expenditures for supplies and materials for 1978.

SCHOOL SIZE	LEVEL			
	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 -9)	SENIOR HIGH SCHOOL (10 - 12)	TOTAL
Small (0 - 199)				
Medium (200 - 599)				
Large (Over 600)				

* Include only those teachers actually instructing students. Exclude all non-teaching administrators and support staff at both the school and system levels.

A TOTAL SCHOOL JURISDICTION INFORMATION

4. Provide the total expenditures for <u>equipment</u> for 1978.

	LEVEL			
SCHOOL SIZE	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 -9)	SENIOR HIGH SCHOOL (10 - 12)	TOTAL
Small (0 - 199)				
Medium (200 - 599)				
Large (Over 600)				

5. Provide the total expenditures for the <u>transportation</u> of all students for 1978.

	LEVEL			
SCHOOL SIZE	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 -9)	SENIOR HIGH SCHOOL (10 - 12)	TOTAL
Small (0 - 199)				
Medium (200 - 599)				
Large (Over 600)				

A TOTAL SCHOOL JURISDICTION INFORMATION

6. Indicate the number of minutes per day and minutes per week of instructional time for each level.

INSTRUCTIONAL TIME	LEVEL		
	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 - 9)	SENIOR HIGH SCHOOL (10 - 12)
MINUTES/DAY			
MINUTES/WEEK			

B SECOND LANGUAGE INSTRUCTION

7. For each of the second language programs offered in your jurisdiction, indicate the number of minutes per week of second language instruction and the percentage this represents of the total instructional time.

PROGRAM	LEVEL					
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 - 9)		SENIOR HIGH SCHOOL (10 - 12)	
	MIN/WK	% TOTAL	MIN/WK	% TOTAL	MIN/WK	% TOTAL
FRENCH						
CORE						
EXTENDED						
BILINGUAL						
IMMERSION						
UKRAINIAN						
CORE						
BILINGUAL						
GERMAN						
CORE						

B SECOND LANGUAGE INSTRUCTION

8. Indicate (✓) which of the following subjects are instructed in the second language for each of the programs which your jurisdiction offers.

LEVEL	PROGRAM			
	FRENCH			UKRAINIAN
	EXTENDED	BILINGUAL	IMMERSION	BILINGUAL
ELEMENTARY (1 - 6)				
Art				
Drama				
Health				
Mathematics				
Music				
Physical Education				
Religion				
Science				
Social Studies				
Other (Specify)				
JUNIOR HIGH SCHOOL (7 - 9)				
Art				
Drama				
Health				
Mathematics				
Music				
Physical Education				
Religion				
Science				
Social Studies				
Other (Specify)				
SENIOR HIGH SCHOOL (10 - 12)				
Art				
Drama				
Health				
Mathematics				
Music				
Physical Education				
Religion				
Science				
Social Studies				
Other(Specify)				

B SECOND LANGUAGE INSTRUCTION

9. For each second language program offered, indicate whether it is in an implementation or maintenance stage (refer to the definitions on p. 2).

PROGRAM	LEVEL		
	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 - 9)	SENIOR HIGH SCHOOL (10 - 12)
FRENCH			
CORE			
EXTENDED			
BILINGUAL			
IMMERSION			
UKRAINIAN			
CORE			
BILINGUAL			
GERMAN			
CORE			

B SECOND LANGUAGE INSTRUCTION

10.a) For each second language program offered, indicate the number of FTE teachers* and students by school size and instructional level for your jurisdiction on June 30, 1978.

CORE FRENCH --

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

EXTENDED FRENCH —

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

* Include only those teachers actually instructing students. Exclude all support staff at both the school and system levels.

B SECOND LANGUAGE INSTRUCTION

10.a) For each second language program offered, indicate the number of FTE teachers* and students by school size and instructional level for your jurisdiction on June 30, 1978.

BILINGUAL FRENCH --

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

IMMERSION FRENCH —

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

* Include only those teachers actually instructing students. Exclude all support staff at both the school and system levels.

B SECOND LANGUAGE INSTRUCTION

10.a) For each second language program offered, indicate the number of FTE teachers* and students by school size and instructional level for your jurisdiction on June 30, 1978.

CORE UKRAINIAN —

SCHOOL SIZE	LEVEL							
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

BILINGUAL UKRAINIAN —

SCHOOL SIZE	LEVEL							
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

* Include only those teachers actually instructing students. Exclude all support staff at both the school and system levels.

B SECOND LANGUAGE INSTRUCTION

10.a) For each second language program offered, indicate the number of FTE teachers* and students by school size and instructional level for your jurisdiction on June 30, 1978.

CORE GERMAN —

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

10.b) For each second language program offered, indicate the number of FTE teachers* and students by school size and instructional level for your jurisdiction on December 31, 1978.

CORE FRENCH —

SCHOOL SIZE	LEVEL: ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 -9)		SENIOR HIGH SCHOOL (10 - 12)		TOTAL	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Small (0 - 199)								
Medium (200 - 599)								
Large (Over 600)								

* Include only those teachers actually instructing students. Exclude all support staff at both the school and system levels.

THE SAME FORMAT, REQUESTING INFORMATION FOR EACH SECOND LANGUAGE PROGRAM BY SCHOOL SIZE AND INSTRUCTIONAL LEVEL, WAS FOLLOWED FOR THE REMAINING QUESTIONS IN SECTION B.

11. Indicate the total earnings (salaries and fringe benefits) of the FTE teachers* for each second language program offered in 1978.

12. Provide the total expenditures for supplies and materials for each second language program offered in 1978.

13. Provide the total expenditures for equipment for each second language program offered in 1978.

14. Provide the total expenditures for the operation and maintenance of equipment for each second language program offered in 1978.

15. Provide the total expenditures for the transportation of second language students in 1978.

B SECOND LANGUAGE INSTRUCTION

16. Indicate any special activities (trips, camps, cultural events, etc.) and their costs which were provided for students during 1978.

PROGRAM	LEVEL					
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 - 9)		SENIOR HIGH SCHOOL (10 - 12)	
	TYPE	COST	TYPE	COST	TYPE	COST
FRENCH						
CORE						
EXTENDED						
BILINGUAL						
IMMERSION						
UKRAINIAN						
CORE						
BILINGUAL						
GERMAN						
CORE						

B SECOND LANGUAGE INSTRUCTION

17. Indicate any <u>other instructional costs</u> which were incurred for second language programs during 1978.

PROGRAM	LEVEL					
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 - 9)		SENIOR HIGH SCHOOL (10 - 12)	
	TYPE	COST	TYPE	COST	TYPE	COST
FRENCH						
CORE						
EXTENDED						
BILINGUAL						
IMMERSION						
UKRAINIAN						
CORE						
BILINGUAL						
GERMAN						
CORE						

C SECOND LANGUAGE SUPPORT STAFF

18. Indicate the number of FTE instructional support staff provided specifically for the second language program and the percentage of time devoted to each program.

STAFF	SECOND LANGUAGE PROGRAM							
	FRENCH		UKRAINIAN		GERMAN		TOTAL	
	FTE	% TOTAL	FTE	% TOTAL	FTE	% TOTAL	FTE	% TOTAL
Supervisor								
Consultant								
Secretary								
Resource Teacher								
Teacher Aide								
Testing Assistant								
Language Lab Assistant								
Other (Specify)								

C SECOND LANGUAGE SUPPORT STAFF

19. Indicate the total earnings (salaries and fringe benefits) and car allowances of the above second language instructional support staff for 1978.

STAFF	SECOND LANGUAGE PROGRAM			
	FRENCH	UKRAINIAN	GERMAN	TOTAL
Earnings				
Supervisor				
Consultant				
Secretary				
Resource Teacher				
Teacher Aide				
Testing Assistant				
Language Lab Assistant				
Other (Specify)				
Total Car Allowances				

20. Indicate any other system-wide resource personnel (consultants, research assistants, etc.) who provide services for second language programs. Indicate the percentage of time spent on second language programs, total earnings (salaries and fringe benefits) and car allowances for 1978.

STAFF	FTE	% SECOND LANGUAGE PROGRAM			TOTAL EARNINGS
		FRENCH	UKRAINIAN	GERMAN	
Total Car Allowances					

C SECOND LANGUAGE SUPPORT STAFF

21. Indicate any professional development activities and their costs which were provided for staff during 1978.

PROGRAM	LEVEL					
	ELEMENTARY (1 - 6)		JUNIOR HIGH SCHOOL (7 - 9)		SENIOR HIGH SCHOOL (10 - 12)	
	TYPE	COST	TYPE	COST	TYPE	COST
FRENCH						
CORE						
EXTENDED						
BILINGUAL						
IMMERSION						
UKRAINIAN						
CORE						
BILINGUAL						
GERMAN						
CORE						

D SECOND LANGUAGE PROGRAM DEVELOPMENT

22. Indicate the remuneration paid to teachers for the acquisition, development and/or revision of curricular materials for each second language program during 1978.

PROGRAM	LEVEL		
	ELEMENTARY (1 - 6)	JUNIOR HIGH SCHOOL (7 - 9)	SENIOR HIGH SCHOOL (10 - 12)
FRENCH			
CORE			
EXTENDED			
BILINGUAL			
IMMERSION			
UKRAINIAN			
CORE			
BILINGUAL			
GERMAN			
CORE			

THE SAME FORMAT, REQUESTING INFORMATION FOR EACH SECOND LANGUAGE PROGRAM BY INSTRUCTIONAL LEVEL, WAS FOLLOWED FOR THE REMAINING QUESTIONS IN SECTION D.

23. Indicate the expenditures for supplies and materials acquired on a system-wide basis for the second language program during 1978.

24. Indicate the types of services purchased or contracted and their cost for the development and/or revision of curricular materials during 1978.

25. Indicate the remuneration paid to teachers for the acquisition, development and/or revision of assessment materials for each second language program during 1978.

26. Indicate the types of services purchased or contracted and their cost for the development and/or revision of assessment materials during 1978.

27. Indicate any other developmental costs which were incurred for second language programs during 1978.

APPENDIX B

INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

1. Provide the allocation of board funds.

Item	% Budget	Total Dollars

2. What are the policies of your board concerning the following:

(a) allocation of supervisory staff

_____

_____

(b) allocation of support staff

_____

_____

(c) library/resource material

_____

_____

(d) teacher preparation time

_____

_____

(e) other

_____

_____

3. Does your jurisdiction have any priorities with respect to specific programs? Yes ___ No ___

If yes, what are they? _____

_____

_____

_____

_____

4. What is the policy regarding student transportation:

   (a) for the system _____

   _____

   (b) for second language programs _____

   _____

5. Provide the number of schools in each of the following categories:

	ELEMENTARY	JUNIOR HIGH	SENIOR HIGH
SMALL (0-199)			
MEDIUM (200-599)			
LARGE (Over 600)			

6. How does the information required in our study differ from that kept for your own use?

   _____

   _____

   _____

   _____

   _____

   _____

7. As a result of the second language programs, have there been any benefits to your jurisdiction (more teacher planning time, more teacher-pupil contact, lower pupil/teacher ratio, etc.)?

   (a) elementary _____

   _____

   (b) junior high _____

   _____

   (c) senior high _____

   _____

8. What are the reasons for offering second language programs in your jurisdiction?

   _____

   _____

   _____

   _____

   _____

   _____

9. Indicate the percent distribution of time per program for each support person indicated in questions 18 and 20.

10. What are the reasons for the type of second language teachers employed?

(a) itinerant

(b) integrated

(c) other

11. For second language programs in an implementation stage, provide the year the program was initiated and the grade level attained as of September, 1978.

12. Provide a list of textbooks and reference materials for each second language program offered.

APPENDIX C

INSTRUCTIONAL COSTS
BY SCHOOL SIZE

Table 21

Distribution of Additional Teacher Costs for
Elementary Second Language Programs
according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$<14,000>	$< 695>		$<14,695>
Board B Urban	<60,915>	4,310		<56,605>
Board C Urban	< 9,485>	< 5,032>		<14,517>
Board D Rural	8,236	<39,647>		<31,411>
Board E Rural		< 1,855>		< 1,855>
EXTENDED FRENCH				
Board A Urban	< 9,445>	<7,163>		<16,608>
Board D Rural	27,037			27,037
BILINGUAL FRENCH				
Board D Rural	51,060			51,060
IMMERSION FRENCH				
Board A Urban		<55,069>		<55,069>
Board B Urban	<24,902>	68,431		43,529
Board C Urban		<26,988>		<26,988>
Board D Rural	2,109			2,109
Board E Rural		< 3,618>		< 3,618>
BILINGUAL UKRAINIAN				
Board A Urban		<20,151>		<20,151>
Board B Urban	2,754	23,369		26,123

Table 22

Distribution of Additional Teacher Costs for
Junior High Second Language Programs
according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$11,427	$<24,310>	$23,748	$10,865
Board B Urban	<7,568>	<24,423>		<31,991>
Board C Urban		1,333		1,333
Board D Rural	28,755			28,755
Board E Rural		< 554>		< 554>
EXTENDED FRENCH				
Board D Rural	6,627			6,627
BILINGUAL FRENCH				
Board D Rural	9,941			9,941
IMMERSION FRENCH				
Board A Urban		< 1,730>	2,394	664
Board B Urban		58,990		58,990
Board E Rural		<10,894>		<10,894>
CORE UKRAINIAN				
Board A Urban		< 682>	<1,496>	<2,718>
Board B Urban		715		715
CORE GERMAN				
Board A Urban			3,910	3,910

Table 23

Distribution of Additional Teacher Costs for
Senior High Second Language Programs
according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$4,874	$	$29,822	$34,696
Board B Urban		41,174	<52,258>	<11,084>
Board C Urban		1,210		1,210
Board D Rural	323	13,777		14,100
BILINGUAL FRENCH				
Board D Rural		<23,006>		<23,006>
IMMERSION FRENCH				
Board B Urban		19,872		19,872
CORE UKRAINIAN				
Board A Urban			3,896	3,896
Board B Urban			< 6,217>	< 6,217>
CORE GERMAN				
Board A Urban	< 850>		24,637	23,787
Board B Urban			2,902	2,902

Table 24

Distribution of "Other" Instructional Costs for Elementary Second Language Programs according to School Size

Programs	Small	Medium	Large	Total
CORE FRENCH				
Board A Urban				
Board B Urban				
Board C Urban	$ 297	$ 770		$1,067
Board D Rural	1,764	2,669		4,433
Board E Rural		185		185
EXTENDED FRENCH				
Board A Urban	3,120	33,677		36,797
Board D Rural	2,370			2,370
BILINGUAL FRENCH				
Board D Rural	2,202			2,202
IMMERSION FRENCH				
Board A Urban		28,543		28,543
Board B Urban	25,547	75,969		101,516
Board C Urban		13,846		13,846
Board D Rural	478			478
Board E Rural		4,135		4,135
BILINGUAL UKRAINIAN				
Board A Urban		7,537		7,537
Board B Urban	3,536	54,623		58,159

Table 25

Distribution of "Other" Instructional Costs for Junior High Second Language Programs according to School Size

Programs	Small	Medium	Large	Total
CORE FRENCH				
Board A Urban	$ 3,006	$ 7,272	$ 12,285	$ 22,563
Board B Urban				
Board C Urban		663		663
Board D Rural	1,791			1,791
Board E Rural		656		656
EXTENDED FRENCH				
Board D Rural	1,670			1,670
BILINGUAL FRENCH				
Board D Rural	1,399			1,399
IMMERSION FRENCH				
Board A Urban			750	750
Board B Urban		73,540		73,540
Board E Rural		1,850		1,850
CORE UKRAINIAN				
Board A Urban				
Board B Urban		375		375
CORE GERMAN				
Board A Urban			24	24

Table 26

Distribution of "Other" Instructional Costs for
Senior High Second Language Programs
according to School Size

Programs	Small	Medium	Large	Total
CORE FRENCH				
Board A Urban	$957	$	$20,553	$21,510
Board B Urban			1,860	1,860
Board C Urban		429		429
Board D Rural	445	181		626
BILINGUAL FRENCH				
Board D Rural		1,169		1,169
IMMERSION FRENCH				
Board B Urban		38,357		38,357
CORE UKRAINIAN				
Board A Urban			80	80
Board B Urban			375	375
CORE GERMAN				
Board A Urban	132		859	991
Board B Urban			400	400

Table 27

Distribution of Total Instructional Costs for Elementary Second Language Programs according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$ <14,000>	$ < 695>		$ <14,695>
Board B Urban	<60,915>	4,310		<56,605>
Board C Urban	< 9,188>	< 4,262>		<13,450>
Board D Rural	10,000	<36,978>		< 26,978>
Board E Rural		< 1,670>		< 1,670>
EXTENDED FRENCH				
Board A Urban	< 6,325>	26,514		20,189
Board D Rural	29,407			29,407
BILINGUAL FRENCH				
Board D Rural	53,262			53,262
IMMERSION FRENCH				
Board A Urban		<26,526>		< 26,526>
Board B Urban	645	144,400		145,045
Board C Urban		< 13,142>		< 13,142>
Board D Rural	2,587			2,587
Board E Rural		517		517
BILINGUAL UKRAINIAN				
Board A Urban		<12,614>		< 12,614>
Board B Urban	6,290	77,992		84,282

Table 28

Distribution of Total Instructional Costs for
Junior High Second Language Programs
according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$14,433	$<17,038>	$36,033	$33,428
Board B Urban	<7,568>	<24,423>		<31,991>
Board C Urban		1,996		1,996
Board D Rural	30,546			30,546
Board E Rural		102		102
EXTENDED FRENCH				
Board D Rural	8,297			8,297
BILINGUAL FRENCH				
Board D Rural	11,340			11,340
IMMERSION FRENCH				
Board A Urban		<1,730>	3,144	1,414
Board B Urban		132,530		132,530
Board E Rural		<9,044>		<9,044>
CORE UKRAINIAN				
Board A Urban		< 682>	<1,496>	<2,178>
Board B Urban		1,090		1,090
CORE GERMAN				
Board A Urban			3,934	3,934

Table 29

Distribution of Total Instructional Costs for Senior High Second Language Programs according to School Size

Programs	Small	Medium	Large	TOTAL
CORE FRENCH				
Board A Urban	$5,831	$	$50,375	$56,206
Board B Urban		41,174	< 50,398>	< 9,224>
Board C Urban		1,639		1,639
Board D Rural	768	13,958		14,726
BILINGUAL FRENCH				
Board D Rural		< 21,837>		< 21,837>
IMMERSION FRENCH				
Board B Urban		58,229		58,229
CORE UKRAINIAN				
Board A Urban			3,976	3,976
Board B Urban			< 5,842>	< 5,842>
CORE GERMAN				
Board A Urban	< 718>		25,496	24,778
Board B Urban			3,302	3,302

APPENDIX D

COST SCHEDULES

BOARD A URBAN
TOTAL SYSTEM

SCHOOL COSTS	Small	Medium	Large	TOTAL
ELEMENTARY				
INSTRUCTIONAL				
Teacher Salaries	$10,111,878	$17,150,452		$27,262,330
Equipment	21,163	20,870		42,033
Materials	157,431	266,721		424,152
Transportation	44,681	75,693		120,374
TOTAL INSTRUCTIONAL	$10,335,153	$17,513,736		$27,848,889
JUNIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries	$1,745,674	$9,213,380	$3,626,228	$14,585,282
Equipment	4,387	11,956	7,366	23,709
Materials	31,801	174,543	61,166	267,510
Transportation	4,036	4,133	206	8,375
TOTAL INSTRUCTIONAL	$1,785,898	$9,404,012	$3,694,966	$14,884,876
SENIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries	$217,947		$16,506,780	$16,724,727
Equipment	1,275		129,331	130,606
Materials	9,350		865,901	875,251
Transportation			3,759	3,759
TOTAL INSTRUCTIONAL	$228,572		$17,505,771	$17,734,343

BOARD A URBAN
CORE FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 70,881	$ 77,418		$148,299
Equipment				
Materials				
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 70,881	$ 77,418		$148,299

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 152	Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff	3,131	Assessment	
Resource Personnel		Remuneration Services	
Supervision	3,862	Other	
TOTAL ANCILLARY	$ 7,145	TOTAL DEVELOPMENTAL	

BOARD A URBAN
CORE FRENCH - JUNIOR HIGH
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 82,602	$297,261	$125,468	$505,331
Equipment				
Materials	3,006	7,272	12,285	22,563
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 85,608	$304,533	$137,753	$527,894

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 4,295	Remuneration	$ 608
		Materials	120
		Services	
Support Staff	10,708	Assessment	
Resource Personnel	12,282	Remuneration	7,022
		Services	
Supervision	13,684	Other	
TOTAL ANCILLARY	$ 40,969	TOTAL DEVELOPMENTAL	$ 7,750

BOARD A URBAN
CORE FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 28,368		$552,311	$580,679
Equipment				
Materials	957		4,267	5,224
Transportation				
Other			16,286	16,286
TOTAL INSTRUCTIONAL	$ 29,325		$572,864	$602,189

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 608	Curriculum	
Professional Development	1,488	Remuneration Materials Services	$ 120
Support Staff	38,647	Assessment	
Resource Personnel		Remuneration Services	
Supervision	18,941	Other	
TOTAL ANCILLARY	$ 59,684	TOTAL DEVELOPMENTAL	$ 120

BOARD A URBAN
EXTENDED FRENCH - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 31,075	$ 40,692		$ 71,767
Equipment				
Materials	3,120	33,677		36,797
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 34,195	$ 74,369		$108,564

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 2,587	Remuneration	$ 6,541
		Materials	500
		Services	363
Support Staff	1,917	Assessment	
Resource Personnel	4,123	Remuneration	
		Services	
Supervision	21,409	Other	
TOTAL ANCILLARY	$ 30,036	TOTAL DEVELOPMENTAL	$ 7,404

BOARD A URBAN
IMMERSION FRENCH - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$294,364		$294,364
Equipment				
Materials		14,250		14,250
Transportation		14,293		14,293
Other				
TOTAL INSTRUCTIONAL		$322,907		$322,907

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 4,500	Curriculum	
		Remuneration	$ 17,337
Professional Development	5,749	Materials	1,000
		Services	5,367
Support Staff	64,044	Assessment	
		Remuneration	6,936
Resource Personnel	20,529	Services	1,886
Supervision	46,676	Other	4,118
TOTAL ANCILLARY	$141,498	TOTAL DEVELOPMENTAL	$ 36,644

BOARD A URBAN
IMMERSION FRENCH - JUNIOR HIGH
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 2,906	$ 15,907	$ 18,813
Equipment				
Materials			750	750
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 2,906	$ 16,657	$ 19,563

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 328	Remuneration	$ 8,310
		Materials	500
		Services	261
Support Staff	1,314	Assessment	
Resource Personnel	1,374	Remuneration	
		Services	
Supervision	7,724	Other	
TOTAL ANCILLARY	$ 10,740	TOTAL DEVELOPMENTAL	$ 9,071

BOARD A URBAN
BILINGUAL UKRAINIAN - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$104,338		$104,338
Equipment				
Materials		990		990
Transportation		6,547		6,547
Other				
TOTAL INSTRUCTIONAL		$111,875		$111,875

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 888	Remuneration	$ 5,157
		Materials	160
		Services	256
Support Staff	9,894	Assessment	
Resource Personnel	9,080	Remuneration	1,848
		Services	1,145
Supervision	16,470	Other	
TOTAL ANCILLARY	$ 36,332	TOTAL DEVELOPMENTAL	$ 8,566

BOARD A URBAN
CORE UKRAINIAN - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 14,377	$ 3,572	$ 17,949
Equipment				
Materials				
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 14,377	$ 3,572	$ 17,949

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 100
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision		Other	
TOTAL ANCILLARY		TOTAL DEVELOPMENTAL	$ 100

BOARD A URBAN
CORE UKRAINIAN - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries			$ 34,957	$ 34,957
Equipment				
Materials			80	80
Transportation				
Other				
TOTAL INSTRUCTIONAL			$ 35,037	$ 35,037

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 100
Support Staff	$ 2,324	Assessment	
Resource Personnel		Remuneration Services	
Supervision	1,766	Other	
TOTAL ANCILLARY	$ 4,090	TOTAL DEVELOPMENTAL	$ 100

BOARD A URBAN
CORE GERMAN - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries			$ 9,639	$ 9,639
Equipment				
Materials			24	24
Transportation				
Other				
TOTAL INSTRUCTIONAL			$ 9,663	$ 9,663

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 100
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 2,008	Other	
TOTAL ANCILLARY	$ 2,008	TOTAL DEVELOPMENTAL	$ 100

BOARD A URBAN
CORE GERMAN - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 1,019		$129,743	$130,762
Equipment				
Materials	132		859	991
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 1,151		$130,602	$131,753

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 270	Curriculum	
Professional Development		Remuneration Materials Services	$ 100
Support Staff	1,549	Assessment	
Resource Personnel		Remuneration Services	
Supervision	8,207	Other	
TOTAL ANCILLARY	$ 10,026	TOTAL DEVELOPMENTAL	$ 100

BOARD B URBAN
TOTAL SYSTEM

SCHOOL COSTS	Small	Medium	Large	TOTAL
ELEMENTARY				
INSTRUCTIONAL				
Teacher Salaries	$6,140,321	$6,270,191		$12,410,512
Equipment	14,220	5,430		19,650
Materials	200,688	221,240		421,928
Transportation	229,943	281,491		511,434
TOTAL INSTRUCTIONAL	$6,585,172	$6,778,352		$13,363,524
JUNIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries	$2,934,098	$3,742,147		$ 6,676,245
Equipment	5,851	12,066		17,917
Materials	125,420	132,382		257,802
Transportation	122,252	165,773		288,025
TOTAL INSTRUCTIONAL	$3,187,621	$4,052,368		$ 7,239,989
SENIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries		$1,382,816	$6,034,552	$7,417,368
Equipment		11,227	88,298	99,525
Materials		67,205	215,143	282,348
Transportation		51,609	229,154	280,763
TOTAL INSTRUCTIONAL		$1,512,857	$6,567,147	$8,080,004

BOARD B URBAN
CORE FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$252,923	$257,386		$510,309
Equipment				
Materials				
Transportation				
Other				
TOTAL INSTRUCTIONAL	$252,923	$257,386		$510,309

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 3,600
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 7,482	Other	
TOTAL ANCILLARY	$ 7,482	TOTAL DEVELOPMENTAL	$ 3,600

BOARD B URBAN
CORE FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$153,879	$138,576		$292,455
Equipment				
Materials				
Transportation				
Other				
TOTAL INSTRUCTIONAL	$153,879	$138,576		$292,455

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 2,350
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 7,482	Other	
TOTAL ANCILLARY	$ 7,482	TOTAL DEVELOPMENTAL	$ 2,350

BOARD B URBAN
CORE FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$100,957	$182,997	$283,954
Equipment				
Materials				
Transportation				
Other			1,860	1,860
TOTAL INSTRUCTIONAL		$100,957	$184,857	$285,814

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 3,200
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 7,482	Other	
TOTAL ANCILLARY	$ 7,482	TOTAL DEVELOPMENTAL	$ 3,200

BOARD B URBAN
IMMERSION FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$296,551	$547,976		$844,527
Equipment	2,005	3,420		5,425
Materials	10,644	25,634		36,278
Transportation	7,488	36,783		44,271
Other	5,410	10,132		15,542
TOTAL INSTRUCTIONAL	$322,098	$623,945		$946,043

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 2,100	Curriculum	
Professional Development	12,190	Remuneration	$ 600
		Materials	10,020
		Services	
Support Staff	127,182	Assessment	
Resource Personnel	12,500	Remuneration	
		Services	
Supervision	33,487	Other	2,844
TOTAL ANCILLARY	$187,459	TOTAL DEVELOPMENTAL	$ 13,464

BOARD B URBAN
IMMERSION FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$322,274		$322,274
Equipment		3,657		3,657
Materials		17,581		17,581
Transportation		50,098		50,098
Other		2,204		2,204
TOTAL INSTRUCTIONAL		$395,814		$395,814

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 910	Remuneration	$ 1,650
		Materials	3,894
		Services	900
Support Staff	28,105	Assessment	
Resource Personnel	24,750	Remuneration	
		Services	
Supervision	25,112	Other	
TOTAL ANCILLARY	$ 78,877	TOTAL DEVELOPMENTAL	$ 6,444

BOARD B URBAN
IMMERSION FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$168,095		$168,095
Equipment		1,907		1,907
Materials		9,170		9,170
Transportation		26,131		26,131
Other		1,149		1,149
TOTAL INSTRUCTIONAL		$206,452		$206,452

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 680	Remuneration	
		Materials	$ 3,276
		Services	1,300
Support Staff	28,105	Assessment	
Resource Personnel	6,250	Remuneration	
		Services	
Supervision	25,112	Other	
TOTAL ANCILLARY	$ 60,147	TOTAL DEVELOPMENTAL	$ 4,576

BOARD B URBAN
BILINGUAL UKRAINIAN - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 10,290	$116,897		$127,187
Equipment				
Materials		1,940		1,940
Transportation	3,536	52,683		56,219
Other				
TOTAL INSTRUCTIONAL	$ 13,826	$171,520		$185,346

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 800	Remuneration Materials Services	$ 5,826
Support Staff	13,223	Assessment	
Resource Personnel		Remuneration Services	6,140
Supervision	19,605	Other	200
TOTAL ANCILLARY	$ 33,628	TOTAL DEVELOPMENTAL	$ 12,166

BOARD B URBAN
CORE UKRAINIAN - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 11,003		$ 11,003
Equipment				
Materials		375		375
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 11,378		$ 11,378

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 5,050	Other	
TOTAL ANCILLARY	$ 5,050	TOTAL DEVELOPMENTAL	

BOARD B URBAN
CORE UKRAINIAN - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	large	TOTAL
INSTRUCTIONAL				
Teacher Salaries			$ 17,003	$ 17,003
Equipment				
Materials			375	375
Transportation				
Other				
TOTAL INSTRUCTIONAL			$ 17,378	$ 17,378

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 5,050	Other	
TOTAL ANCILLARY	$ 5,050	TOTAL DEVELOPMENTAL	

BOARD B URBAN
CORE GERMAN - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries			$ 9,465	$ 9,465
Equipment				
Materials			400	400
Transportation				
Other				
TOTAL INSTRUCTIONAL			$ 9,865	$ 9,865

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision		Other	
TOTAL ANCILLARY		TOTAL DEVELOPMENTAL	

BOARD C URBAN
TOTAL SYSTEM

SCHOOL COSTS	Small	Medium	Large	TOTAL
ELEMENTARY				
INSTRUCTIONAL				
Teacher Salaries	$600,912	$531,848		$1,132,760
Equipment	11,094	10,159		21,253
Materials	33,364	32,497		65,861
Transportation	33,420	31,576		64,996
TOTAL INSTRUCTIONAL	$678,790	$606,080		$1,284,870
JUNIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries		$608,280		$680,280
Equipment		14,448		14,448
Materials		43,545		43,545
Transportation		38,806		38,806
TOTAL INSTRUCTIONAL		$705,079		$705,079
SENIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries		$557,819		$557,819
Equipment		13,384		13,384
Materials		40,345		40,345
Transportation		35,398		35,398
TOTAL INSTRUCTIONAL		$646,946		$646,946

BOARD C URBAN
CORE FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 41,895	$ 9,081		$ 50,976
Equipment		116		116
Materials	297	654		951
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 42,192	$ 9,851		$ 52,043

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 1,062	Other	
TOTAL ANCILLARY	$ 1,062	TOTAL DEVELOPMENTAL	

BOARD C URBAN
CORE FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 13,024		$ 13,024
Equipment				
Materials		663		663
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 13,687		$ 13,687

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 177	Other	
TOTAL ANCILLARY	$ 177	TOTAL DEVELOPMENTAL	

BOARD C URBAN
CORE FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 14,932		$ 14,932
Equipment				
Materials		429		429
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 15,361		$ 15,361

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 177	Other	
TOTAL ANCILLARY	$ 177	TOTAL DEVELOPMENTAL	

BOARD C URBAN
IMMERSION FRENCH - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 53,840		$ 53,840
Equipment				
Materials		6,946		6,946
Transportation		6,900		6,900
Other				
TOTAL INSTRUCTIONAL		$ 67,686		$ 67,686

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 400	Curriculum	
Professional Development	818	Remuneration Materials Services	
Support Staff	7,367	Assessment	
Resource Personnel		Remuneration Services	
Supervision	2,124	Other	
TOTAL ANCILLARY	$ 10,709	TOTAL DEVELOPMENTAL	

BOARD D RURAL
TOTAL SYSTEM

SCHOOL COSTS	Small	Medium	Large	TOTAL
ELEMENTARY				
INSTRUCTIONAL				
Teacher Salaries	$875,134	$709,829		$1,584,963
Equipment	1,376	15,170		16,546
Materials	43,846	23,286		67,132
Transportation	173,777	110,300		284,077
TOTAL INSTRUCTIONAL	$1,094,133	$858.585		$1,952,718
JUNIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries	$448,798	$490,910		$939,708
Equipment	949	5,661		6,610
Materials	36,215	13,182		49,397
Transportation	144,477	48,227		192,704
TOTAL INSTRUCTIONAL	$630,439	$557,980		$1,188,419
SENIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries	$355,460	$711,865		$1,067,325
Equipment	364	14,812		15,176
Materials	14,069	29,574		43,643
Transportation	56,057	130,256		186,313
TOTAL INSTRUCTIONAL	$425,950	$886,507		$1,312,457

BOARD D RURAL
CORE FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 58,220	$ 32,047		$ 90,267
Equipment	830	1,106		1,936
Materials	934	1,563		2,497
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 59,984	$ 34,716		$ 94,700

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 755	Remuneration Materials Services	$ 2,826
Support Staff	3,691	Assessment	
Resource Personnel		Remuneration Services	
Supervision	3,712	Other	
TOTAL ANCILLARY	$ 8,158	TOTAL DEVELOPMENTAL	$ 2,826

BOARD D RURAL
CORE FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 56,828			$ 56,828
Equipment	686			686
Materials	1,105			1,105
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 58,619			$ 58,619

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 370	Remuneration Materials Services	$ 1,210
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	2,474	Other	
TOTAL ANCILLARY	$ 2,844	TOTAL DEVELOPMENTAL	$ 1,210

BOARD D RURAL
CORE FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 13,966	$ 26,180		$ 40,146
Equipment	135	139		274
Materials	310	42		352
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 14,411	$ 26,361		$ 40,772

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 245	Remuneration Materials Services	$ 363
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision		Other	
TOTAL ANCILLARY	$ 245	TOTAL DEVELOPMENTAL	$ 363

BOARD D RURAL
EXTENDED FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 35,170			$ 35,170
Equipment	149			149
Materials	2,221			2,221
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 37,540			$ 37,540

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 122
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 1,237	Other	
TOTAL ANCILLARY	$ 1,237	TOTAL DEVELOPMENTAL	$ 122

BOARD D RURAL
EXTENDED FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 12,724			$ 12,724
Equipment	113			113
Materials	1,557			1,557
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 14,394			$ 14,394

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		DEVELOPMENTAL	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 183
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 825	Other	
TOTAL ANCILLARY	$ 825	TOTAL DEVELOPMENTAL	$ 183

BOARD D RURAL
BILINGUAL FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 79,964			$ 79,964
Equipment	290			290
Materials	1,912			1,912
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 82,166			$ 82,166

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 658	Remuneration Materials Services	$ 372
Support Staff	27,061	Assessment	
Resource Personnel		Remuneration Services	
Supervision	7,423	Other	
TOTAL ANCILLARY	$ 35,142	TOTAL DEVELOPMENTAL	$ 372

BOARD D RURAL
BILINGUAL FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOLCOSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 27,017			$ 27,017
Equipment	163			163
Materials	1,236			1,236
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 28,416			$ 28,416

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 219	Remuneration Materials Services	$ 344
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	928	Other	
TOTAL ANCILLARY	$ 1,147	TOTAL DEVELOPMENTAL	$ 344

BOARD D RURAL
BILINGUAL FRENCH - SENIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 65,909		$ 65,909
Equipment		455		455
Materials		714		714
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 67,078		$ 67,078

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 493	Remuneration Materials Services	$ 461
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	928	Other	
TOTAL ANCILLARY	$ 1,421	TOTAL DEVELOPMENTAL	$ 461

BOARD D RURAL
IMMERSION FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries	$ 27,421			$ 27,421
Equipment	64			64
Materials	414			414
Transportation				
Other				
TOTAL INSTRUCTIONAL	$ 27,899			$ 27,899

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development		Remuneration Materials Services	$ 111
Support Staff		Assessment	
Resource Personnel		Remuneration Services	
Supervision	$ 3,093	Other	
TOTAL ANCILLARY	$ 3,093	TOTAL DEVELOPMENTAL	$ 111

BOARD E RURAL
TOTAL SYSTEM

SCHOOL COSTS	Small	Medium	Large	TOTAL
ELEMENTARY				
INSTRUCTIONAL				
Teacher Salaries		$371,206		$371,206
Equipment				
Materials		17,814		17,814
Transportation		18,229		18,229
TOTAL INSTRUCTIONAL		$407,249		$407,249
JUNIOR HIGH				
INSTRUCTIONAL				
Teacher Salaries		$249,496		$249,496
Equipment				
Materials		13,525		13,525
Transportation		11,025		11,025
TOTAL INSTRUCTIONAL		$274,046		$274,046

BOARD E RURAL
CORE FRENCH - ELEMENTARY
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 21,696		$ 21,696
Equipment				
Materials		185		185
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 21,881		$ 21,881

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 491	Remuneration Materials Services	$ 62
Support Staff		Assessment	
Resource Personnel	3,186	Remuneration Services	215
Supervision		Other	174
TOTAL ANCILLARY	$ 3,677	TOTAL DEVELOPMENTAL	$ 451

BOARD E RURAL
CORE FRENCH - JUNIOR HIGH
MAINTENANCE STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 15,675		$ 15,675
Equipment				
Materials		656		656
Transportation				
Other				
TOTAL INSTRUCTIONAL		$ 16,331		$ 16,331

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 63	Curriculum	
Professional Development	180	Remuneration Materials Services	$ 63
Support Staff		Assessment	
Resource Personnel	1,499	Remuneration Services	101
Supervision		Other	82
TOTAL ANCILLARY	$ 1,742	TOTAL DEVELOPMENTAL	$ 246

BOARD E RURAL
IMMERSION FRENCH - ELEMENTARY
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 99,295		$ 99,295
Equipment				
Materials		4,135		4,135
Transportation				
Other				
TOTAL INSTRUCTIONAL		$103,430		$103,430

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities		Curriculum	
Professional Development	$ 200	Remuneration	$ 672
		Materials	62
		Services	
Support Staff		Assessment	
Resource Personnel	3,186	Remuneration	
		Services	215
Supervision		Other	174
TOTAL ANCILLARY	$ 3,386	TOTAL DEVELOPMENTAL	$ 1,123

BOARD E RURAL
IMMERSION FRENCH - JUNIOR HIGH
IMPLEMENTATION STAGE

SCHOOL COSTS	Small	Medium	Large	TOTAL
INSTRUCTIONAL				
Teacher Salaries		$ 39,903		$ 39,903
Equipment				
Materials		1,812		1,812
Transportation				
Other		38		38
TOTAL INSTRUCTIONAL		$ 41,753		$ 41,753

SYSTEM COSTS	TOTAL		TOTAL
ANCILLARY		**DEVELOPMENTAL**	
Special Activities	$ 63	Curriculum	
Professional Development	90	Remuneration Materials Services	$ 63
Support Staff		Assessment	
Resource Personnel	1,499	Remuneration Services	101
Supervision		Other	82
TOTAL ANCILLARY	$ 1,652	TOTAL DEVELOPMENTAL	$ 246